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ABSTRACT

This handbook is designed to facilitate the process of course classification in California community college districts under the revisions to the California Administrative Code, Title 5. Section 1 explains the purpose of the handbook and gives background on its development, the authority of the Chancellor's Office with respect to the approval of credit courses, and the process and forms to be used to certify the procedures currently being used at the districts to approve courses. Section 2 presents and explains Title 5 revisions in the areas of academic standards, repeatability of courses, disabled students, and minimum standards. Section 3 offers background on the Board of Governors' policies regarding the strengthening of academic standards and the reconciliation of civil rights and academic reform. Using a question-and-answer format, section 4 attempts to impart the clearest understanding of the regulations in such areas as course outlines, critical thinking, co- and pre-requisites, and non-degree credit versus noncredit. Sections 5 and 6 present model procedures and relevant forms for classifying courses for credit. Section 7 discusses issues related to student assessment; section 8 presents an article on public policy and educational reforms in the areas of "college-level" and "critical thinking"; and section 9 offers supplemental criteria for the classification of English as a Second Language Courses. Finally, section 10 offers guidance on the preparation of course outlines. (AYC)

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COURSE STANDARDS HANDBOOK

July 1987

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Course Standards Handbook

Chancellor's Office
California Community Colleges

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Acknowledgments

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Contra Costa
Gavilan
Grossmont
Mt. San Antonio
San Diego
San Joaquin Delta
Solano
Yuba

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Dr. Richard D. Yeo, Executive Dean, Chabot College
Dr. Ione H. Elioff, Dean of Instruction and Student Services, Solano College

We thank them all most sincerely.

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STATEMENT OF INTENT

Purpose of the Handbook

This handbook is designed to facilitate course classification under revisions to Sections 55002 and 55805.5 of the California Administrative Code, Title 5. These revisions were adopted as policy by the Board of Governors in May 1986, and have not yet been filed with the Secretary of State. This handbook is provided to the districts at this time in order to facilitate a process for course classification that is both proper and timely. Statements made in the white sections of the handbook are to be regarded as an agreement between the Chancellor's Office and the colleges regarding precisely what the colleges are to implement in response to the Board of Governors policy on Academic Standards. It should be stressed, however, that while the explanations on white paper are meant to have legal force, those on yellow paper are not offered with the intent to prescribe. They are rather an effort to create a common reference point statewide for discussion and implementation.

The nature of this agreement is that colleges who proceed to classify courses in accordance with the documents herein specified, and with their own procedures as these have been certified by the Chancellor's Office for that college, will not in the future be subject to sanctions for so acting, even if later interpretations should differ. These materials represent the clearest understanding regarding the intent of the regulations to date. [Should there be any further clarification of the regulations themselves, prior to filing with the Secretary of State, the clarification would be consistent with explanations in this handbook.] (Subsequent to this initial effort to strengthen standards, of course, there might arise a need to rethink some of the issues. Should new policies or guidelines thus come about, they would not be enforced retroactively).

Background of the Statement of Intent

In April 1987, 13 colleges were asked to review a draft of the enclosed materials. Based upon information received from this review, changes were made regarding content, wording, and layout. There were also general comments that focused on three matters:

(a) Whether the timeline was feasible,

(b) What the Chancellor's Office would be looking for in judging compliance with those deadlines, and

(c) How much guidance from the Chancellor's Office was appropriate. (Many commentators expressed some concern that the materials in the original draft were too specific and detailed. Some also questioned the Model Outlines and Checklists [see Section 4], which were more prominent in the earlier draft, wondering if it was in fact the intention of the Chancellor's Office that everyone in the state use these forms, thus creating a uniform system. They also commented that the drafts were in some places too prescriptive in nature.)

This Statement of Intent was developed to clarify these issues, and the handbook was revised to play down the importance of the models offered. While colleges may adopt these models as their own, they are under no obligation to do so. They are included in the packet to stimulate ideas concerning scope and substance for those who will be responsible for the design of procedures. On the other hand, the level of detail and explanation in the original draft has been little reduced since comments from most reviewers were in favor of the earlier explanations.

Authority

In discussions of the new Title 5 regulations regarding the approval of credit courses, questions have been raised as to what the Chancellor's Office is currently obligated or empowered to do.

Under California Administrative Code, Title 5, Section 51021, the Chancellor is charged with "approving . . . all courses . . . in the manner provided in . . . Section 55000" of Title 5. (See also Education Code Section 78200). Under Education Code Section 78200.5 the Chancellor is requested to provide criteria for course approval (in a handbook) and to monitor approved courses for compliance with these criteria. The revision of 55002 now authorizes the local curriculum committee to determine "college level" with respect to "understanding and applying concepts," "learning skills, and vocabulary" (Title 5, Section 55002(a)(10) and (11)) in connection with the approval of courses.

Districts and colleges have been in consultation with their various divisions to develop procedures for reviewing presently-approved courses to determine to which credit category each belonged, under the revision of 55002 and 55805.5. In the spirit of these new regulations, which center professional decision making locally, the Chancellor's Office has elected to carry out its own oversight responsibilities for course approval not by reviewing each course directly but rather by reviewing and certifying the procedures by which colleges are classifying courses.

Local course approvals will continue to be subject to audit to determine if they have been carried out in accordance with the certified procedures for that college or district in all substantive respects, and that the resulting classifications are in accord with the revisions to Title 5, Section 55002 and handbook(s) mandated in 78200.5.

Certification of Procedures

Procedures to be certified by the Chancellor's Office should be submitted between July 15 and October 15, 1987, using the attached form, **Request for Certification**, accompanied by the requested documentation.

If procedures are district-wide, the signature should be that of the district superintendent and (each of the) chief instructional officer(s) and president(s) of the academic senate(s) or that of the district academic senate president, if there is one. If procedures vary by college, each college should submit its own procedures, signed by the college president, the chief instructional officer and the college president of the academic senate.

In certifying procedures, the Chancellor's Office will use the checklist on the back of the form for "Certification of Local Academic Standards Classification Procedures." This checklist is included in this packet for information only. It is to be filled out by the Chancellor's Office as the basis for determining certification.

Proposed Academic Standards Classification Procedures

REQUEST FOR CERTIFICATION

(Single College District)

Name of District	Date of Application

Attached: Required Documents

- ☐ Description of selection and constitution of curriculum committee*
- ☐ Procedures for submitting courses for credit classification to be distributed to departments upon certification of classification process
- ☐ Forms to be used by departments when seeking credit classification from curriculum committee
- ☐ Description of documentation to be required and maintained on file in support of credit classification requests
- ☐ Definitions of "college level" and "critical thinking" to be used by Curriculum Committee *or* description of the process to be used for developing working definitions of these terms within departments

President/Superintendent	President, Academic Senate
Chief Instructional Officer	Title

---

* A copy of the report requested by the statewide Academic Senate (in *Role of Faculty in Curriculum*, February 17, 1987) may be submitted to meet this documentation requirement.

Proposed Academic Standards Classification Procedures

REQUEST FOR CERTIFICATION

(Multiple College District
with Different System for Each College)

Name of College ____________________ Date of Application ____________________

Attached: Required Documents

- ☐ Description of selection and constitution of curriculum committee*
- ☐ Procedures for submitting courses for credit classification to be distributed to departments upon certification of classification process
- ☐ Forms to be used by departments when seeking credit classification from curriculum committee
- ☐ Description of documentation to be required and maintained on file in support of credit classification requests
- ☐ Definitions of "college level" and "critical thinking" to be used by Curriculum Committee *or* description of the process to be used for developing working definitions of these terms within departments

President/Superintendent ____________________ President, Academic Senate ____________________

Chief Instructional Officer ____________________ Title ____________________

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* A copy of the report requested by the statewide Academic Senate (in *Role of Faculty in Curriculum*, February 17, 1987) may be submitted to meet this documentation requirement.

Proposed Academic Standards Classification Procedures

REQUEST FOR CERTIFICATION

(Multiple College District
with one system)

Name of District	Date of Application

Attached: Required Documents

☐ Description of selection and constitution of curriculum committee*

☐ Procedures for submitting courses for credit classification to be distributed to departments upon certification of classification process

☐ Forms to be used by departments when seeking credit classification from curriculum committee

☐ Description of documentation to be required and maintained on file in support of credit classification requests

☐ Definitions of "college level" and "critical thinking" to be used by Curriculum Committee *or* description of the process to be used for developing working definitions of these terms within departments

Name of College	President, Academic Senate
Chief Executive Officer	Chief Instructional Officer
Name of College	President, Academic Senate
Chief Executive Officer	Chief Instructional Officer

(Add sheets if necessary to accommodate signatures from all colleges)

---

* A copy of the report requested by the statewide Academic Senate (in *Role of Faculty in Curriculum*, February 17, 1987) may be submitted to meet this documentation requirement.

Chancellor's Office
California Community Colleges

Certification
of
Course Standards Classification Procedures

District or College	Location

☐ Procedure Certified
☐ Model Procedure In Use
☐ Procedure with Exception (Request for Exception Attached)

☐ Procedure Certified Subject to the Following Conditions:

☐ Certification Witheld for Further Clarification as Follows:

Signature	Date
Title	Telephone Number

CERT/T5/6/87 **THIS FORM IS TO BE COMPLETED BY THE CHANCELLORS OFFICE STAFF**

CHECKLIST for CERTIFYING Course Standards Classification Procedures

Y N ?

☐ ☐ ☐ 1 **CURRICULUM COMMITTEE: Is the curriculum committee set up in accordance with 55002a(1)?**

☐ ☐ ☐ 2 **FORMS & CHECKLISTS: In the application forms and in the curriculum committees review procedures, are all the criteria specified in Title 5, Sections 55002 and 55805.5 addressed?**

(a) Allows for sign-off by official of curriculum committee and local district board
(b) Outline that asks for: Unit value
  Objectives
  Content and/or scope
  Required reading and writing assignments
  Outside of class assignments
  Instructional methods
  Methods for evaluating whether objectives have been met
(c) Specifies basis for grades
(d) Shows ratio of quantity of student work to units of credit
(e) For 55002a courses, specifies: (i) independent work
  (ii) entrance skills and consequent pre-requisites
  (iii) other pre-requisites and/or co-requisites
  (iv) requirements for critical thinking
  (v) level of learning skills and vocabulary
  (vi) level of educational materials
(f) Specifies repeatability criteria

☐ ☐ ☐ 3 **OPERATIONAL CRITERIA: Are the criteria for approval clearly spelled out?** Specifically, are they spelled out clearly enough that a third party (e.g. an accreditation committee) could readily apply them to most cases, arriving at decisions similar to those of the curriculum committee, on the basis of the same information? In particular are the terms **"college level"** and **"critical thinking"** either:

(a) Operationally defined within the application form or instructions
(b) Explicated in the criteria to be applied by the curriculum committee in making its decisions (e.g. in a checklist to be used in approving courses for degree applicable credit)
(c) Fully discussed in background materials used in training faculty

☐ ☐ ☐ 4 **DEFINITIONS: Are these definitions consistent with those to be used by other districts and within the broadest interpretation of the meaning of those terms as understood by the academic community?**

☐ ☐ ☐ 5 **QUALITY OF INFORMATION: Is the documentation to be made available under the proposed procedures adequate to making sound decisions using the criteria explained in #3, above?** In particular, do the forms and documentation required for recommendation and approval of courses provide enough information to permit an adequate assessment of:

(a) Nature and appropriateness of pre-requisites, if any
(b) Amount and difficulty of assigned work, including homework
(c) Nature of the "critical thinking" involved in the course, if any, and how it will be assessed
(d) Basis for grading; nature of essays required, if any

☐ ☐ ☐ 6 **AVAILABILITY OF INFORMATION: Do the procedures assure the continued availability of the information and/or documentation originally used by the department to recommend the course for approval and/or used by the curriculum committee to approve the course?** Would it be possible for a third party to come on-site and find enough information to make an informed, independent judgment regarding a course approved by the committee?

☐ ☐ ☐ 7 **VALIDATION:** Are policies regarding requisites consistent with civil rights requirements and Board of Governor's Policy (Agenda Item #4, Policy #3, January, 1987), regarding **(a) sole criterion measures (b) face validity, (c) empirical validity, (d) provision of remedial courses, (e) appeal rights?**

THIS FORM IS TO BE COMPLETED BY THE CHANCELLORS OFFICE STAFF

Implementation Timelines

July 15 through October 15, 1987

Period during which Academic Standards Classification Procedures are to be submitted for approval

September 15, 1987 (or sooner if requested by college/district)

Chancellor's Office certifies Classification Procedures (using criteria listed on previous page, the "Checklist for Certifying Local Credit Classification Procedures)

July 1, 1988

All existing courses will have been reviewed by a properly constituted Curriculum Committee or a subcommittee (including division committees, etc.) authorized by the Curriculum Committee to conduct an initial screening.

During this initial screening, courses are to be categorized as either:

(a) clearly falling into one of the categories defined in 55002 and 55805, or
(b) requiring substantive modification, or at least a better outline and/or documentation, before appropriate classification can be made.

Designation in 1988-89 Catalog

Based upon the initial screening, a course may be listed in the 1988-89 catalog as follows:

Degree Credit:
(i) Falls into one of the categories defined in 55805.5.
(ii) Has been screened on the basis of information that addresses each of the points in 55002 for the category recommended, through a procedure approved by the Chancellor's Office.
(iii) Has been approved by the full curriculum committee as meeting all of the criteria in 55002a. (Such approval may be on the basis of the initial screening without a second review of the documentation submitted, unless there is some question.)

Interim Degree Credit (or equivalent designation)
(i) Falls under one of the categories in 55805.5.
(ii) Has been a credit course in the past.
(iii) Is intended to continue as degree credit.
(iv) During the initial screening, has been determine to require redevelopment to meet all the criteria in 55002a, or to need further

documentation; or has not yet been reviewed by the full curriculum committee.

Non-Degree Credit

(i) Does not fall under one of the categories in 55805.5.
(ii) Has been a credit course in the past.
(iii) Is intended now to be for non-degree credit.
(iv) Has been approved by the full curriculum committee as meeting all of the criteria in 55002(b).

Interim Non-Degree Credit (or equivalent designation)

(i) Meets all the criteria listed immediately above under "Non-Degree Credit."
(ii) Has not been reviewed by the curriculum committee.

Noncredit

(i) Falls under a category in Education Code 84711.
(ii) Has been a noncredit course.

Timelines will change only if Title 5 regulations have not passed into law by June 1, 1988.

Documentation

Certified procedures shall include rules for retention of support documentation which will enable an independent determination regarding the consistency of the application of procedures and the appropriateness of the course classifications by the Curriculum Committee. Such support documentation shall provide information sufficient to determine whether each of the criteria in 55002 has been met. Course documentation may be provided in any of the following ways:

(a) Addenda attached to the original course outline

(b) Reformatted or revised outlines on new forms developed by the district

(c) Reformatted or revised outlines on new forms developed by the Chancellor's Office (see enclosed), or upon locally modified versions of such forms.

(d) Computerized equivalent of any of the above.

Outlines

The curriculum committee may review all the documents offered in support of a course outline, or it may see only the outline (and addenda) with the subcommittee's or department's recommendation.

Colleges are encouraged, but not required to complete new outlines for all courses by July 1, 1988. While the momentum for reform must be maintained, emphasis should be upon the quality of course development and review and upon reasonable workload, not just upon completion of all paperwork (see Implementation Timelines). Meanwhile, the use of addenda, or lists of similar courses coupled with additional information or other time-saving techniques are acceptable -- as long as they do not compromise the quality of information. (See Item #5 on the above "Checklist for Certifying Local Credit Classification" procedures.)

The model outlines in Section 4 are not required. They are included for clarification and information. (Colleges who wish to use them as forms may white out the explanatory material, if desired. The centered title "Model . . ." etc. is intended to be whited out and replaced with the college name.)

Criteria for the Approval of Courses

Provision should be made for the explication of specific criteria and their consistent application by different reviewers.

Subcommittees or persons responsible for the initial review of courses on the basis of complete documentation, and for recommending courses for approval, or for affirming that criteria have been met, may use checklists, form letters, or minutes of meetings to make explicit the specific criteria considered. (Preferably, such specific criteria are not only spelled out in the record of the process, as in minutes of meetings, but, where feasible, are identified in advance where all interested parties may reference them.) Enclosed are two sample checklists, the "Model Checklist for Recommending Classification" -- for the possible use of initial reviewers and the "Model Checklist for Classification," -- for the possible use of those determining final approval. (These are not required but are included only as suggestions.) In the Checklist for Recommending Classification, various forms of documentation are mentioned on the assumption each district might handle these requirements differently.

Exceptions

While explicit rules and guidelines facilitate the efficient assessment of thousands of courses and assure fairness, rules should not substitute for judgment. Where relevant differences between courses are handled consistently, and in good faith, flexibility will do more to support high standards than will too rigid an adherence to rules.

Judgments regarding exceptions and their reasons should be made explicit and put in writing so that a body of precedent can be built up, case by case, to supplement the original guidelines. Such judgments should, preferably, be made by a standing group whose members include each division. Over time, these patterns of decisions can be reassessed to make sure that they are supportive of the spirit of the new regulations.

Funding Level Changes

Courses previously categorized as "credit" that become "noncredit, or as "noncredit" that have become "credit" must be reported to the Chancellor's Office as soon as the change is effective.

No special form exists. Colleges are requested to submit a list of courses, with course names, static identifiers, and TOP codes, that have shifted from "credit" to "noncredit" and a second list of those that have shifted from "noncredit" to "credit".

ACADEMIC STANDARDS
Title 5 Revisions

Comparison of Different Credit Modes -- New Title 5 Regulations

Degree Credit	Non-Degree Credit	Noncredit	Community Service
55805.5 Content and objectives of course fall into one of categories a-e of this section of Title 5		**84711a(1-9) Education Code** Content and objectives of noncredit courses must fall in one of these nine categories	*Content and objectives are limited to those capable of generating sufficient attendance to fully support offerings.*
55002a(1) Recommended by curriculum committee. Approved by local board.	**55002b(1)** Recommended by curriculum committee. Approved by local board. Needed by eligible students.	**55002c(1)** Recommended by curriculum committee. Approved by Board. Needed by enrollees.	**55002d(1)** Approved by local board.
55002a(2) Credentialed Instructor	**55002a(2)** Credentialed Instructor	**55002a(2)** Credentialed Instructor	
55002a(3) Official outline with: 1) scope, units, objectives, and content 2) reading and writing assignments and homework 3) teaching methods 4) methods of evaluation	**55002b(4)** Official outline with: 1) scope, units, objectives, and content 2) reading and writing assignments and homework 3) teaching methods 4) methods of evaluation	**55002c(3)** Resource materials, attendance, achievement standards approved by curriculum committee **55002c(4)** Official outline with: 1) scope, units, objectives, and content 2) teaching methods 3) methods of evaluation	**55002d(2)** Designed for physical, mental, moral, economic, or civic development **55002d(3)** Provides subject matter content, resource materials, and teaching methods which the local board deems appropriate for the enrollees
55002a(4) Instructional objectives are common to all students.	**55002a(4)** Instructional objectives are common to all students.		**55002d(4)** Is conducted in accordance with a predetermined strategy or plan
55002a(5) Student performance is evaluated by essay unless problem solving or skill demonstration is more appropriate; a formal grade is assigned	**55002b(5)** Student performance is evaluated and assigned a formal grade		
55002a(6) Carnegie Units: 3 hours work per week per unit, prorated for labs, etc.	**55002b(6)** Work required per unit locally determined		
55002a(7) Scope and intensity of work require independent study outside class.			
55002a(8) Entrance skills, prerequisites	**55002b(7)** Prerequisites as applicable		
55002a(9) College level language and computational skills necessary			
55002a(10-11) Requires critical thinking, ability to apply "college level" concepts, vocabulary, and learning skills, as determined by local curriculum committee.			
55002a(12) Uses educational materials approved by the curriculum committee as "college level"			
55002a(13) Limits repeated enrollment	**55002b(8)** Partially limits repeated enrollment		**55002d(5)** Open to all community members

Brief History: How the New Regulations Came About

The origins of the new Title 5 regulations are truly "grass roots." At least as early as 1981 faculty members in general and the Academic Senate in particular began to express two concerns:

(1) That the range of skill levels among students in many degree-related classes was so broad that it was impossible to teach the course "at the college level"; and

(2) That, as a consequence, the associate degree from a California community college was losing its credibility.

Over the preceding decade, in fact, the main expansion of the colleges had been in remedial and college preparatory instruction, along with burgeoning numbers of avocational and recreational courses -- all in the credit mode. These changes had eroded assurance that the earning of a degree signified either readiness for transfer or for employment. These conditions were also contributing to a confused public image of the community college mission overall. In response, representatives from the districts were calling for a clearer definition of "college level" and requesting that only courses at that level be counted toward the AA and AS degrees and towards certificates.

At the same time, these leaders also sought to assure open access by maintaining full funding, i.e., "workload" credit, for all rigorously conducted courses that prepared students to perform at the college level.

The formation of the Learning Assessment and Retention Consortium (LARC), in Spring 1982, pointed the way for the integration of these two seemingly disparate missions. The focus on strengthening standards was now combined with a focus on improving the assessment and advisement of students.

These combined concerns finally became a matter of public record when, in Fall 1982, after a series of informal joint meetings, the executive boards of the Faculty Senate Association and the Association of Chief Instructional Officers submitted to the Chancellor's Office a set of criteria for the conduct of associate degree courses. The new Title 5 regulations are a direct response to that initial document.

In response to this paper, and to related recommendations and directives form CPEC (in **Promises to Keep**) and from the Legislature, then-Chancellor Gerald Hayward established the Task Force on Academic Quality in April 1983.

The task force continued the original impetus, with the number of faculty from across the curriculum carefully balancing the number of concerned administrators from across several areas of responsibility. The Task Force quickly established itself as the focal point for active reform, its members assuming leadership in their respective associations throughout the state. During its three-year history, it became actively involved in identifying and acting upon the most critical policy questions in the three areas essential to guaranteeing both quality and access: (1) academic standards, (2) matriculation and (3) remediation.

The result of these efforts to date are an impact on the review of the Master Plan -- which will shape policy in the community colleges for years to come -- and a series of proposed changes in Title 5 regulations.

The first of these sets of changes, those now being implemented, are designed to build into law the requirement that only courses of "college level" be credited toward the degree, while (a) reserving to the professional judgment of the colleges what the term shall mean, and (b) retaining as fully reimbursable credit courses ("workload" credit) that enable students to perform successfully at "college level."

BOARD OF GOVERNORS OF THE
CALIFORNIA COMMUNITY COLLEGES
September 18-19, 1986

REVISIONS TO REGULATIONS STRENGTHENING THE ASSOCIATE DEGREE

2

For Recommendation

Summary

At its May 1985 meeting, the Board of Governors adopted regulations establishing distinctive sets of standards for courses which may and may not be applied for credit toward the associate degree and requiring that noncredit courses be approved through the same local curriculum review and approval process as that required for credit courses.

Pursuant to the Administrative Procedures Act, those regulations were submitted to the Office of Administrative Law for review and filing with the Secretary of State. The Office of Administrative Law reviewed the regulations and disapproved them for failing to meet certain statutory requirements for clarity and necessity.

The regulations were revised to meet the objections of the Office of Administrative Law and presented to the Board again in May 1986. Testimony at that meeting resulted in two additional modifications to Section 55002(a). While the revisions are intended to be technical in nature, the regulations have been renoticed in their entirety as more than one year has passed since the previous notification. This action will also allow adequate time for review and comment.

The regulation changes are presented for Board action at this time.

Recommended Action

The Instructional Policy Committee should recommend that the Board President declare a public hearing on the proposed regulations appearing on pages 3 through 8 of this item and that the full Board approve those regulations for implementation in the districts no later than July 1, 1988. The Committee should further recommend that the Board delegate to the Chancellor the necessary authority to adopt the regulations in accordance with the Board's direction.

Staff Presentation:	*Thomas J. Nussbaum* *Vice Chancellor and General Counsel*
	Laura Faulk Willson *Vice Chancellor, Academic Affairs*

Background

In May 1985, the Board of Governors adopted regulations strengthening the associate degree by establishing two distinct sets of standards for courses which may and may not be applied for credit toward the degree. The regulations also required the approval of noncredit courses through the same local curriculum review and approval procedures as is required for the two categories of credit courses. These regulations followed the Board's receipt in January 1985 of a report from the Task Force on Academic Quality recommending several means for strengthening the associate degree. The report recognized that the course standards were the first major step in that strengthening process.

The regulations adopted by the Board of Governors were submitted to the Office of Administrative Law (OAL) as required by the Administrative Procedures Act. That Office is charged with reviewing the regulations adopted by state agencies, using the criteria of authority, clarity, necessity and reference. In mid-October of 1985, the Office disapproved the Board's regulations for failure to comply with the requirements of clarity and necessity.

In May 1986, staff again presented rewritten regulations which were responsive to the criticisms of OAL. At that time, testimony was heard from the Academic Senate and the Chief Executive Officers Association requesting further modifications in two subsections of Section 55002. After consultation with those groups and others, the Chancellor now presents for Board action a set of regulations formed by consensus.

Revised Regulations

Clarity

Two issues raised by the OAL regarding a lack of clarity are worthy of particular note:

First, the OAL opined that several terms used in the regulations were "subjective" and "have no precise meaning." Examples of such terms are "appropriate readings," "appropriate entrance skills," "college level" and "the ability to think critically." In a related objection, OAL indicated that the language describing the participants in the colleges' curriculum approval process "...does not indicate with certainty the faculty organizations or groups whose recommendation will be accepted..."

In actual practice, of course, participants in a college's curriculum development and approval process do exercise professional judgment concerning such interpretable issues as the "college level" of the required readings in a course or whether the course has "appropriate entrance skills."

Staff has, therefore, revised the regulations to make clear: 1) that the locus of all decisions regarding each "subjective" term is the college's and/or district's curriculum committee; and 2) that the curriculum committee shall be either a committee of the academic senate or a committee which shall include faculty and may include other members, so long as its composition is mutually agreed to by the district or college administration and the academic senate. This language will permit the colleges to have continuing flexibility in comprising their curriculum development entities and, at the same time, allay OAL's objections to the use of "subjective" terms.

Second, the OAL commented that the earlier proposed revision of subsection 55805(b) was unclear. This subsection had required that associate degree credit courses shall "include not more than one course not more than one level below English 1A." Several colleges currently have more than one course that leads directly to English 1A. The Board's intent in adopting that language was to allow all English courses one level below English 1A to count toward the associate degree while allowing each student to receive degree-applicable credit for only one such course. Staff believes that the wording changes proposed in that subsection will correct the lack of clarity. In addition, staff has determined that greater clarity regarding the intent of this language will be achieved by putting it into a new, separately-numbered section (55805.5) rather than including it directly within the existing 55805.

Necessity

The OAL also found that the Board's regulations were not supported by "substantial evidence of their necessity." Establishing evidence of necessity is accomplished not in the regulations themselves, but in the accompanying arguments set forth by staff in the rulemaking file when submitting regulations to OAL. In the first submission, staff based its argument of necessity on the collective effect of all the regulations in strengthening the rigor of degree-applicable courses and distinguishing them from remedial courses not applicable to degrees. OAL requires that each subsection be individually justified. While this will require substantially greater workload, staff will comply with requirements in the rulemaking file when it resubmits the revised regulations to OAL.

Effective Date

When the Board of Governors adopted these regulations in May 1985, it adopted a resolution making the regulations effective July 1, 1986. Due to the disapproval of the regulations by the Office of Administrative Law in October 1985, and the subsequent delay caused by the need to consult on testimony heard in May 1986, staff now recommends that the regulations become effective July 1, 1988. This would allow colleges sufficient time to do the comprehensive review of curricula that is required to conform courses to the new standards and to publish the resultant changes in college catalogs in advance of their enforcement.

Resolution

BE IT RESOLVED by the Board of Governors of the California Community Colleges that it hereby endorses the following regulatory changes in Title 5, Part VI of the California Administrative Code, to become effective July 1, 1987:

1. Section 55002 is repealed.

~~55002. Standards and Criteria for Courses and Classes.~~

~~(a) A credit course is a course which at a minimum:~~

~~(1) Is recommended by the responsible college officials and the academic senate or other appropriate faculty body as being of appropriate academic rigor and has been approved by the local district governing board as a collegiate course meeting the needs of the student eligible for admission.~~

~~(2) Is taught by a credentialed instructor.~~

~~(3) Is offered as described in an outline and/or curriculum guide in official files. That outline and/or curriculum guide shall specify the unit value, scope, objectives, content in terms of a specific body of knowledge, appropriate readings and writing and outside assignments, instructional methodology and methods of evaluation for determining whether the stated objectives have been met by students.~~

~~(4) Is taught in accordance with a set of instructional objectives common to all students.~~

~~(5) Provides for measurement of student performance in terms of the stated course objectives and culminates in a formal recorded grade based upon uniform standards in accordance with Section 55758 of this part and which is permanently recorded as an evaluation of student performance.~~

~~(6) Grants units of credit based upon a relationship specified by the governing board, between the number of units assigned to the course and the number of lecture and/or laboratory hours or performance criteria specified in the course outline.~~

~~(7) Shall require, when so designated, the completion of appropriate prerequisites.~~

~~(8) Allows repeated enrollment only as permitted by provisions of Division 2 (commencing with Section 51000 of this part).~~

~~(b) A noncredit course is a course which, at a minimum:~~

~~(1) Is approved by the local district governing board as a course meeting the educational needs of the enrolled students.~~

~~(2) Is taught by a credentialed instructor. A supplementary lecturer need not hold a credential if he or she lectures fewer than four times in a semester or quarter.~~

~~(3) Treats subject matter and uses resource materials, teaching methods, and standards of attendance and achievement appropriate for the enrolled students.~~

~~(4) Is conducted in accordance with a course outline and/or curriculum guide in official college files. That outline and/or curriculum guide shall specify the scope, objectives, content, instructional methodology, and methods of evaluation for determining whether the course objectives have been met.~~

~~(c) A community services class at a minimum:~~

~~(1) Is approved by the local district governing board.~~

~~(2) Is designed for the physical, mental, moral, economic, or civic development of persons enrolled therein.~~

~~(3) Provides subject matter content, resource materials, and teaching methods deemed appropriate for the enrolled students.~~

~~(4) Is conducted in accordance with a predetermined strategy or plan.~~

~~(5) Is open to all members of the community.~~

~~(6) Attendance in community services classes may not be claimed for apportionment purposes.~~

~~NOTE: Authority cited: Sections 66700, 71020, 71027 and 78405 Education Code. Reference: Sections 71027, 78200 and 78405, Education Code.~~

2. New Section 55002 is added, to read:

55002. Standards and Criteria for Courses and Classes.

(a) An associate degree credit course is a course which has been designated as appropriate to the associate degree in accordance with the requirements of Section 55805.5, and, the following:

(1) Is recommended by the college and/or district curriculum committee as meeting the requirements of this subsection and has been approved by the local district governing board as a collegiate course meeting the needs of the students eligible for admission.

The college and/or district curriculum committee shall be established by the mutual agreement of the college and/or district administration and the academic senate. The committee shall either be a committee of the academic senate or a committee which shall include faculty and may otherwise be comprised in any way that is mutually agreeable to the college and/or district and the academic senate.

(2) Is taught by a credentialed instructor.

(3) Is offered as described in an outline and/or curriculum guide in official college files. That outline and/or curriculum guide shall specify the unit value, scope, objectives, and content in terms of a specific body of knowledge, required reading and writing assignments, and other outside of class assignments, instructional methodology and methods of evaluation for determining whether the stated objectives have been met by students.

(4) Is taught in accordance with a set of instructional objectives common to all students enrolled in the course.

(5) Provides for measurement of student performance in terms of the stated course objectives and culminates in a formal recorded grade based upon uniform standards in accordance with Section 55758 of this part, which is permanently recorded as an evaluation of student performance; bases grades on demonstrated proficiency in subject matter and the ability to demonstrate that proficiency, at least in part, by means of essays, or, in courses where the instructor deems them to be appropriate, problem solving exercises or skills demonstrations by students.

(6) Grants units of credit based upon a relationship specified by the governing board, between the number of units assigned to the course and the number of lecture and/or laboratory hours or performance criteria specified in the course outline; and requires a minimum of three hours of work per week including class time for each unit of credit, prorated for short term, lab and activity courses.

(7) Treats subject matter with a scope and intensity which requires students to study independently outside of class time.

(8) Requires, when the college and/or district curriculum committee deems appropriate, entrance skills and consequent prerequisites for the course before students are enrolled.

(9) Requires as a pre-or co-requisite to enrollment in other courses throughout the degree and certificate curricula, eligibility for enrollment in associate degree credit courses in English and/or mathematics when language and/or computational skills at the associate degree level are deemed by the college and/or district curriculum committee as necessary for success in such courses.

(10) Requires, in order to participate in the course, the ability to think critically and to understand and apply concepts at levels determined by the curriculum committee to be college level..

(11) Requires learning skills and a vocabulary which the curriculum committee deems appropriate for a college course.

(12) Requires that educational materials used be judged by the curriculum committee to be college level.

(13) Allows repeated enrollment only as permitted by provisions of Division 2 (commencing with Section 51000), Sections 55761-55763 and 58161 of this part.

(b) A credit course designated by the governing board of a district as not applicable to the associate degree is a course which, at a minimum:

(1) Is recommended by the college and/or district curriculum committee and has been approved by the local district governing board as a course meeting the needs of the students eligible for admission.

(2) Is taught by a credentialed instructor.

(3) Is offered as described in an outline and/or curriculum guide in official college files. That outline and/or curriculum guide shall specify the unit value, scope, objectives, and content in terms of a specific body of

knowledge, required reading and writing assignments, other outside of class assignments, instructional methodology and methods of evaluation for determining whether the stated objectives have been met by students.

(4) Is taught in accordance with a set of instructional objectives common to all students.

(5) Provides for measurement of student performance in terms of the stated course objectives and culminates in a formal recorded grade based upon uniform standards in accordance with Section 55758 of this part, which is permanently recorded as an evaluation of student performance.

(6) Grants units of credit based upon a relationship specified by the district governing board between the number of units assigned to the course and the number of lecture and/or laboratory hours or performance criteria specified in the course outline.

(7) Shall require, when the college and/or district curriculum committee deems appropriate, the completion of prerequisites for the course before students are enrolled.

(8) Allows repeated enrollment only as permitted by provisions of Division 2 (commencing with Section 51000) Sections 55761-55763 and 58161 of this part.

(c) A noncredit course is a course which, at a minimum:

(1) Is recommended by the college and/or district curriculum committee and approved by the local district governing board as a course meeting the educational needs of the enrolled students.

(2) Is taught by a credentialed instructor.

3) Treats subject matter and uses resource materials, teaching methods, and standards of attendance and achievement which the college and/or district curriculum committee deems appropriate for the enrolled students.

(4) Is conducted in accordance with a course outline and/or curriculum guide in official college files. That outline and/or curriculum guide shall specify the scope, objectives, content, instructional methodology, and methods of evaluation for determining whether the course objectives have been met.

(d) A community services class at a minimum:

(1) Is approved by the local district governing board.

(2) Is designed for the physical, mental, moral, economic, or civic development of persons enrolled therein.

(3) Provides subject matter content, resource materials, and teaching methods which the district governing board deems appropriate for the enrolled students.

(4) Is conducted in accordance with a predetermined strategy or plan.

(5) Is open to all members of the community.

(6) Attendance in community services classes may not be claimed for apportionment purposes.

NOTE: Authority cited: Sections 66700, 71022 and 71066, Education Code. Reference: Sections 66701, 71066 and 72285, Education Code.

3. Section 55805.5 is added to read:

55805.5 Criteria. The criteria established by the governing board of a community college district to implement its philosophy on the associate degree shall conform to the standards specified in Section 55002(a) and shall also provide that associate degree credit courses:

(a) Include all lower division courses accepted toward the baccalaureate degree by the California State University or University of California.

(b) Include courses that apply to the major in non-baccalaureate occupational fields.

(c) Include English courses not more than one level below the first transfer level composition course, typically known as English 1A. Each student may count as credit toward the associate degree only one course below the first transfer level composition course.

(d) Include all mathematics courses above and including Elementary Algebra.

(e) Include credit courses in English and mathematics taught in or on behalf of other departments and which, as determined by the local board of trustees, require entrance skills at a level equivalent to those necessary for the courses specified in subsections (c) and (d) above.

NOTE: Authority cited: Sections 66700, 71022 and 71066, Education Code. Reference: Sections 66701, 71066 and 72285, Education Code.

BE IT FURTHER RESOLVED by the Board of Governors, acting under the authority of Section 71091 of the Education Code, that the authority to adopt the regulations on behalf of the Board is hereby delegated to the Chancellor of the California Community Colleges. In accordance with the delegation of this authority, the Chancellor shall make copies of these proposed regulations available to the public for at least 15 days. The Chancellor shall then adopt the regulations as endorsed by the Board in this Resolution if the Chancellor determines on the basis of any comments received no changes are necessary.

BE IT FURTHER RESOLVED that these regulation changes mandate no cost to local agencies or community college districts within the meaning of Section 2231 of the Revenue and Taxation Code.

REPEATABILITY
Title 5 Requirements

55761. District Policy for Course Repetition.

The governing board of a district maintaining a community college shall adopt and publish procedures or regulations pertaining to the repetition of courses for which substandard work has been recorded. For purposes of course repetition, academic renewal, and all other related provisions in this part, the term "substandard" shall be defined as meaning course work for which the grading symbols "D," "F," and/or "NC" (as defined in Section 55758) have been recorded. The procedures or regulations may allow such courses to be repeated and the previous grade and credit to be disregarded in the computation of grade point averages. When course repetition occurs, the permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

NOTE: Authority cited: Sections 71020, 71025, 71027 and 71066, Education Code. Reference: Sections 71066 and 72285, Education Code.

55762. Course Repetition: Implementation.

In adopting procedures or regulations pertaining to the repetition of courses for which substandard academic performance has been previously recorded, the governing board of a district maintaining a community college:

(a) Shall not adopt any regulation or procedure which conflicts with:

(1) Education Code Section 76224, pertaining to the finality of grades assigned by instructors, and

(2) Chapter 2.5 (commencing with Section 59020) of Division 10 of this part, pertaining to the retention and destruction of records and particularly subdivision (d) of Section 59023, relating to the permanency of certain student records;

(b) May permit repetition of any course which was taken in an accredited college or university and for which substandard academic performance as defined in Section 55761 is recorded;

(c) Shall, when adopted procedures or regulations permit course repetition, indicate any specific courses or categories of courses which are exempt from consideration under these regulations;

(d) Shall, in accordance, deem any course repetition permitted under Section 55761 to require "prior written permission from the district superintendent or the district superintendent's authorized representative or representatives;"

(e) Shall clearly indicate any courses repeated under the provisions of this section and Section 55761 on the student's permanent academic record, using an appropriate symbol;

(f) Shall, when adopted procedures or regulations permit course repetition, publish specific procedures to implement this section;

(g) May, in determining transfer of a student's credits, honor similar, prior course repetition actions by other accredited colleges and universities; and

(h) Shall maintain a careful record of actions taken under course repetition procedures or regulations adopted in compliance with this section and Section 55761, since periodic reports may be required by the Chancellor.

NOTE: Authority cited: Sections 66700, 71020, 71025, 71027 and 71066, Education Code. Reference: Sections 71066, 72285, 76224, 78205 and 78207, Education Code.

55763. Course Repetition: Special Circumstances.

(a) The governing board of a district may adopt procedures or regulations pertaining to the repetition of courses for which substandard work has not been recorded. Repetition of courses for which substandard work has not been recorded shall be permitted only upon petition of the student and with the written permission of the district superintendent or authorized representative based on a finding that circumstances exist which justify such repetition

(b) When course repetition under this section occurs, the student's permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

(c) Grades awarded for courses repeated under the provisions of this section shall not be counted in calculating a student's grade point average.

NOTE: Authority cited: Sections 71020, 71025 and 71066, Education Code. Reference: Sections 72285 and 76000, Education Code.

55764. District Policy for Academic Renewal Without Course Repetition.

The governing board of a district maintaining a community college shall adopt and publish procedures or regulations pertaining to the alleviation of previously recorded substandard academic performance, as defined in Section 55761, which is not reflective of a student's demonstrated ability. Such procedures or regulations shall include a clear statement of the educational principles upon which they are based, and shall be referred to as academic renewal regulations. When academic renewal procedures or regulations adopted by the districts permit previously recorded, substandard course work to be disregarded in the computation of grade point averages, the permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

NOTE: Authority cited: Sections 66700, 71020, 71025, 71027 and 71066, Education Code. Reference: Sections 71066, 72285, 76224, 78205 and 78207, Education Code.

55765. Academic Renewal Without Course Repetition: Implementation.

In adopting procedures or regulations pertaining to the alleviation of previously recorded, substandard academic performance, as defined in Section 55764, which is not reflective of a student's demonstrated ability, the governing board of a district maintaining a community college:

(a) Shall not adopt any regulation or procedure which conflicts with:

(1) Education Code Section 76224, pertaining to the finality of grades assigned by instruction, and

(2) Chapter 2.5 (commencing with Section 59020) of Division 10 of this part pertaining to the retention and destruction of records, and particularly subdivision (d) of Section 59023, relating to the permanency of certain student records.

(b) Shall, when the adopted procedures or regulations permit such alleviation, state:

(1) The maximum amount of coursework that may be alleviated;

(2) The amount of academic work to have been completed at a satisfactory level (minimum 2.00) subsequent to the coursework to be alleviated;

(3) The length of time to have elapsed since the coursework to be alleviated was recorded; and

(4) A description of any specific courses and/or categories of courses that are, for any reason, exempt from consideration under the alleviation regulations.

(c) Shall, when the adopted procedures or regulations permit such alleviation, publish specific procedures to be followed in implementing procedures or regulations adopted pursuant to this section and Section 55764 stating, at a minimum:

(1) The procedures to be followed by students in petitioning for alleviation; and

(2) The officers and/or personnel responsible for implementing the procedures or regulations.

NOTE: Authority cited: Sections 66700, 71020, 71025, 71027 and 71066, Education Code. Reference: Sections 71066, 72285, 76224, 78205 and 78207, Education Code.

DISABLED STUDENTS
Title 5 Revisions

PROPOSED TITLE 5 REGULATIONS

SECTION 1. Chapter 1 of Division 7 of Part VI, Title 5 of the California Administrative Code is repealed.

SECTION 2. Chapter 1 is added to read:

CHAPTER 1. DISABLED STUDENT PROGRAMS AND SERVICES

Article 1. General Provisions and Definitions

56000. Scope of Chapter

This chapter applies to community college districts offering educational programs and support services, on and/or off campus, to students with disabilities pursuant to Education Code Sections 78600 and 84850.

Programs receiving funds apportioned pursuant to Education Code Section 84850 shall meet the requirements of this chapter. Any expenditures under the authority of this chapter must meet the following conditions:

(a) The service or instruction is consistent with the stated purpose of programs for students with disabilities as set forth in this chapter;

(b) The service or instruction does not duplicate services or instruction which are otherwise available to all students;

(c) The educational need for the service or instruction is directly related to the functional limitations of the verifiable disabilities of the students to be served;

(d) The need for the service or instruction is directly related to the student's participation in the educational process;

(e) Services or instruction should have as their goal independence and maximum integration of students with disabilities which lead to successful participation in the general college curriculum, vocational preparation and enhanced potential for achieving personal/social goals;

(f) Services or instruction should be provided in the most integrated setting possible consistent with the mission of the community colleges.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56002. Disabled Students.

Disabled students are persons with exceptional needs enrolled at a community college who, because of a verified disability, cannot fully benefit from general education classes, activities, and services provided by the community college without specific additional specialized services and/or educational programs.

Disabilities do not include those which are solely attributable to economic, cultural, or language disadvantages; or disabilities that are expected to continue less than sixty days as determined in Section 56008.

Wherever in this chapter the term "student" is used, such reference means a disabled student served in Disabled Student Programs and Services pursuant to Section 56010-56020 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56004. Appropriate Adaptive Behavior.

Appropriate adaptive behavior is the behavior of a student who assumes the social responsibility necessary to participate in the educational setting in which the student is enrolled. When a determination is needed, appropriate adaptive behavior shall be determined by certificated DSP&S staff.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56006. Functional Limitation.

A functional limitation results from a disability defined in Sections 56010-56020 of this chapter. A functional limitation inhibits the student's ability to participate in the general educational offering(s) of the college.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56008. Verification of Disability.

Verification of a primary disability as defined in Sections 56010-56020 of this chapter is necessary to establish eligibility for participation in DSP&S. The disability shall be verified by certificated and credentialed DSP&S personnel and may be based upon documents provided by credentialed, certified or licensed professionals. The verification must identify the disability and its functional limitations.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56010. Physical Disability.

Physical disability means a vision, mobility, orthopedic or other health impairment.

(a) Visual impairment means blindness or partially sighted.

(b) Mobility and orthopedic impairment means a serious limitation in locomotion or motor functions which indicate a need for one or more of the services or programs described in Sections 56026 and 56028 of this chapter.

(c) Other health impairment means a serious physiological dysfunction of a body part or system which necessitates the use of one or more of the supportive services or programs described in Sections 56026 and 56028 of this chapter.

The student with a physical disability must exhibit appropriate adaptive behavior as defined in Section 56004 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56012. Communication Disability.

Communication disability is defined as an impairment in the process of speech, language or hearing.

(a) Hearing impairment means a total or partial loss of hearing function which impedes the communication process essential to language, educational, social, and cultural interactions.

(b) Speech and language impairment means one or more speech-language disorders of voice, articulation, rhythm and/or the receptive and expressive processes of language.

The student with a communication disability must exhibit appropriate adaptive behavior as defined in Section 56004 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56014. Learning Disability.

Learning disability is defined as a persistent condition of presumed neurological dysfunction which may also exist with other disabling conditions. This dysfunction continues despite instruction in standard classroom situations. Learning disabled adults, a heterogeneous group, are characterized as having:

(a) Average to above average intellectual ability;
(b) Severe processing deficit(s);
(c) Severe aptitude-achievement discrepancy (-ies);
(d) Measured achievement in an instructional or employment setting; and
(e) Measured appropriate adaptive behavior in an instructional or employment setting as defined in Section 56004 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56016. Acquired Brain Injury.

Acquired brain injury means a deficit in brain functioning which is medically verifiable, resulting in a loss of one or more of the following: cognitive, communication, motor, psycho-social and sensory perceptual abilities.

The student with an acquired brain injury, must exhibit appropriate adaptive behavior as defined in Section 56004 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56018. Developmentally Delayed Learner.

The developmentally delayed learner is a student who exhibits the following:

(a) Below average intellectual functioning;

(b) Impaired social functioning;

(c) Potential for measurable achievement in instructional and employment settings;

(d) Measured appropriate adaptive behavior in an instructional or employment setting, as defined in Section 56004 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56020. Multiple Disabilities.

Multiple disabilities are defined as two or more functional impairments described in Sections 56010, 56012, 56014, 56016 and 56018 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56022. Individual Educational Plan.

An individual educational plan (IEP) is a plan to address specific needs of the student. An IEP must be maintained each term for every disabled student enrolled. The IEP specifies those regular and/or special classes and support services identified and agreed upon by both the student and DSP&S credentialed personnel as necessary to meet the student's specific educational needs. Each Individual Educational Plan shall include, but need not be limited to:

(a) A statement of the student's long-term and short-term educational goals and objectives;

(b) A verification of the need for enrollment in special classes and/or provision of support services;

(c) A description of the process by which the student will reach his/her stated goal(s)/objective(s), including enrollment in regular and/or special classes.

(d) A description of the criteria by which student progress will be measured for each goal/objective.

The IEP will be reviewed on a scheduled basis and not less than once a year.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56024. Measurable Progress.

Measurable progress is defined as documented progress towards meeting the goals and objectives stated in the Individual Educational Plan.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56026. Special Services.

Special services are those support services available to students defined in Sections 56010-56020 of this chapter, which are in addition to the regular services provided to all students. Such services enable students to participate in regular activities, programs and classes offered by the college. They may include, but need not be limited to:

(a) Basic DSP&S administrative services;

(b) Access to and arrangements for adaptive educational equipment, materials and supplies required by disabled students;

(c) Job placement and development services related to transition to employment;

(d) Liaison with campus and/or community agencies, including referral and follow-up services to campus or community agencies on behalf of disabled students;

(e) Registration assistance relating to on- or off-campus college registration, including priority enrollment assistance, application for financial aid and related college services;

(f) Special parking, including on-campus parking registration and temporary parking permit arrangements while an application is made for the State handicapped placard;

(g) Supplemental specialized orientation to acquaint disabled students with environmental aspects of the college community;

(h) Program development and accountability including activities to assess program needs to plan, implement, monitor, and evaluate specialized services and instructional programs;

(i) Test-taking facilitation, including arrangement and proctoring of tests and adapted test-taking for disabled students;

(j) Assessment, including both individual and group assessment not otherwise provided by the college to determine functional educational and vocational levels or to verify specific disabilities;

(k) Counseling, including specialized academic, vocational, personal, and peer counseling services specifically for disabled students, not duplicated by ongoing regular counseling services available to all students;

(l) Interpreter services, including manual and oral interpreting for deaf or hard-of-hearing students;

(m) Mobility assistance (on-campus), providing manual or automatic transportation assistance to and from college courses and related educational activities, including mobility training and orientation;

(n) Notetaker services, to provide assistance for disabled students in the classroom;

(o) Reader services, to provide for the coordination and provision of services for disabled students in the instructional setting;

(p) Special class instruction designed to meet the unique educational needs of particular groups of disabled students which do not duplicate existing college courses;

(q) Speech services provided by a licensed speech/language pathologist for students with verified speech disabilities;

(r) Transcription services, including the provision of adapted materials including braille and print;

(s) Transportation assistance (off-campus), only if not otherwise provided by the college to all students, where public accessible transportation is unavailable, and is deemed inadequate by the Chancellor's Office.

(t) Tutoring services, providing for specialized tutoring not otherwise provided by the college;

(u) Purchase or repair of DSP&S equipment, such as for adapted educational equipment, materials and supplies and for transportation vehicles;

(v) Outreach activities designed to recruit potential students with disabilities to the college;

(w) Extra-curricular activities directly related to the student's educational goal.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56028. Special Classes.

Special classes are instructional activities which produce average daily attendance (ADA) and are authorized by Education Code Sections 78400, 78441, 84500, and 84520. Such classes are designed for students with specific disabilities to accommodate functional limitations which would otherwise inhibit the student's ability to succeed in regular classes. Special classes offered for credit or noncredit shall meet the applicable requirements for degree credit, non-degree credit, or noncredit set forth in Sections 55002 and 55805.5 of this part. In addition, special classes:

(a) If offered for credit, shall have as their purpose the provision of interventions that enable disabled students to compensate for functional limitations and/or acquire the skills necessary to complete their educational objectives.

(b) Shall utilize specialized instructional methods and/or materials to facilitate the educational success of disabled students enrolled. In-class instructors and support staff trained in the use of adaptive devices and/or special instructional methodologies for the disabled shall also be utilized. Such methods and/or materials may include, but are not limited to, any or all of the following, as applicable:

(1) Adapted instructional methods;
(2) Tactile devices
(3) Readers, notetakers, and interpreters
(4) Specialized educational equipment and materials
(5) Braille and large-print materials; taped textbooks

District governing boards shall ensure, when meeting the requirements of Sections 55002(a)(1), 55002(b)(1), 55002(c)(1) of this part, that curriculum committees responsible for recommending special class offerings have or obtain the expertise appropriate for determining whether the requirements of this section are satisfied.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

Article 2. General/Administration

56030. Educational Programs and Special Services.

The purpose of special programs and services funded pursuant to this chapter shall be: to integrate the disabled student into the general college program; to provide educational intervention leading to vocational preparation, transfer or general education; and to increase independence or referral of the student to resources in the community most appropriate to the student's needs. Such programs or services shall only be provided when they are facilitating the student's measurable progress towards his or her educational goal. Programs and services funded pursuant to this chapter may include, but need not be limited to:

(a) Assessment of essential skills and abilities;
(b) Prescriptive planning;
(c) Special class instruction;
(d) Counseling or guidance on a group or individual basis;
(e) Vocational preparation, training and job placement;
(f) Special services.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56032. Participation.

(a) Participation by a student in special programs and services shall not preclude participation in any other program or service which may be offered by the college.

(b) Participation of a student with a verified disability shall be deemed appropriate if the results of the identification and assessment process meet the criteria specified in Sections 56010-56020. Local assessment and identification processes shall be approved by the Chancellor in the DSP&S program plan.

(c) In assigning the student to special classes or services funded pursuant to this chapter, the college shall verify the disability through an assessment class or service. Together with the student, the college shall determine whether general supportive services and college classes are adequate to meet the student's particular needs.

(d) Each student served in DSP&S shall have an Individual Educational Plan.

(e) Community colleges shall employ reasonable means of informing all community college students and staff as to the availability of programs and services offered pursuant to this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56034. Student Rights and Responsibilities.

Students benefiting from the provisions of this chapter shall:

(a) Make measurable progress toward an educational goal and will disclose any health condition which may affect the safety and welfare of themselves, staff, and other students of the college;

(b) Be afforded all rights available to the other community college students;

(c) Be assured that all student medical related health records and DSP&S records shall not be made available to anyone other than the following:

(1) DSP&S staff, college health personnel or other appropriate college personnel;

(2) Personnel from the Chancellor's Office;

(3) Personnel from state agencies for the purpose of verification of the student's disability;

(4) For a DSP&S staff validation/audit/evaluation, or other state agency as appropriate.

Authorization by the student is needed for release of medical or health records to any other persons.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56036. Regional, State and Federal Coordination.

The Chancellor may request and the colleges shall provide data in response to requests from regional, state and federal agencies for needs assessments, resource surveys and policy development.

As a means of conducting special projects and enhancing communication between college programs and the Chancellor's Office, the Chancellor shall develop task forces and/or committees as deemed necessary.

The Chancellor's Office shall design and implement regional, local or statewide in-service training programs for professional and support staff. In-service training programs will be developed to meet needs identified at regional and local levels.

The cost of activities specified in this section may be charged to Program Accountability and Development Services (PADS) as defined in subsection (e) of Section 56072 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56038. Cooperative Agreements.

Cooperative agreements may be established among community college districts, Chancellor's Office, and other agencies or organizations for sharing equipment, facilities, staff and other resources in order to provide comprehensive support services and programs for students with disabilities.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56040. Student/Instructor Ratio.

Student/Instructor ratios shall be established by each district and reported in the annual program plan pursuant to Section 56046 and budget reports pursuant to Section 56048, in order to meet the exceptional needs of the students enrolled. Class size should not be so large as to impede measurable progress and/or endanger the well being and safety of students and staff. Student/Instructor ratios shall be reported to the Chancellor's Office as part of Section 56048 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56042. Advisory Committee.

Each community college providing services or programs for which the college receives funds pursuant to this chapter shall establish an advisory committee which shall meet not less than once per year.

The advisory committee shall be composed of representatives of the community served, including: public agencies, consumer groups, faculty, students, and any other organization(s) or individuals as determined by program needs.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56044. Special Class Course Repeatability.

(a) Repetition of special classes is subject to the provisions of Section 58161 of this part. However, districts are authorized to permit additional repetitions to meet the requirements of Section 504 of the 1973 Rehabilitation Act, 29 U.S.C. 794, and shall develop local implementing policies and procedures. Such policies and procedures shall conform, but need not be limited to, the following:

(1) When continuing success of the student in other regular and/or special classes is dependent on additional repetitions of a specific special class.

(2) When additional repetition of a specific special class is required for the student to meet the performance criteria of that class.

(3) When additional repetition of a specific special class is essential to completing a student's preparation for enrollment into other courses which meet the requirements of a student's educational objectives.

(b) Repetition of adaptive physical education is allowed provided the student participates in at least one additional credit course within the general offerings of the college which is not a physical education class, and makes progress towards the stated educational goal as documented in the Individual Educational Plan. Students enrolled only in adaptive physical education may repeat adaptive physical education for credit for three semesters or five quarters. Additional repetition of adaptive physical education for such students may be offered in noncredit classes. Districts/colleges shall develop and implement mechanisms for monitoring special class repeatability and determining credit/noncredit applicability to meet the educational needs of disabled students adopted pursuant to the provisions of this subsection.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code, 29 U.S.C. 794.

Article 3. Plans and Program Requirements

56046. DSP&S Program Plan.

Requirements for the DSP&S program are as follows:

(a) A DSP&S program plan shall be submitted by districts for each college within the district. Colleges which adopt a comprehensive plan shall include the DSP&S plan in the comprehensive plan. Upon approval by the Chancellor, the DSP&S plan shall be a contract between the District and the Chancellor.

Expenditures of funds appropriated pursuant to this chapter must conform to the approved plan.

(b) The DSP&S program plan shall be submitted annually to the Chancellor, on forms developed by the Chancellor's Office. These forms will be transmitted to the colleges at least 60 days prior to the deadline for submission.

(c) The DSP&S program plans shall contain the following:

(1) Long-term goals of the DSP&S program;

(2) Short-term measurable objectives of the program;

(3) Activities to be undertaken to accomplish the goals and objectives;

(4) An assessment and identification process for all students deemed appropriate to receive instruction and services;

(5) A description of criteria used to establish Individual Educational Plans and measurable progress;

(6) Staff/student ratios for instruction and services;

(7) A description of the methods used for program evaluation;

(8) A description of the process for increasing representation of persons with disabilities from the community, including outreach to disabled persons who are ethnic minorities and women.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56048. Enrollment Reports and Budget.

The district shall submit enrollment and budget reports to the Chancellor. These reports will be used by the Chancellor to forecast students served, to develop budgets to allocate funds, and to provide the basis for validation and audits that are conducted by the Chancellor.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56050. Review of DSP&S Program Plan, Enrollment Reports and Budget.

All plans, enrollment reports, and budgets shall be reviewed and evaluated by the Chancellor. The Chancellor shall approve plans in whole or in part for funding.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56052. Evaluation.

The Chancellor shall conduct evaluations of DSP&S programs to determine their effectiveness. Evaluations shall utilize an external peer review process following the accreditation model. The evaluation shall, at a minimum, provide for the gathering of outcome data, staff and student perceptions of program effectiveness, access requirements of Section 504.of the Federal Rehabilitation Act of 1973 (29 USC 794 et.seq.), and data on the implementation of the program as outlined in Section 84850 and 78600.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code, 29 U.S.C. 794.

56054. Program Audits.

The Chancellor shall provide for on-site validations and audits of DSP&S programs to determine the accuracy of the reported number of students served and expenditure of funds pursuant to the requirements of this chapter. The Chancellor may adjust allocations to reflect validation and audit findings.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

Article 4. Personnel

56056. Authorized Professional Staff.

Persons providing services in the DSP&S program as supervisors, counselors or instructors shall possess a valid Community College credential authorizing the services provided, and shall meet the minimum academic and/or experiential requirements set forth in Sections 56058-56064 of this article.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56058. Supervisor/Administrator of Disabled Students Programs and Services.

Each participating community college shall designate one certificated employees as the supervisor/administrator of DSP&S. For the purpose of this section, the supervisor/administrator is defined as that individual who has responsibility for the administration and supervision of certificated and classified staff and who oversees the operation of DSP&S. The designated supervisor/administrator must hold either the supervisor credential or the credential deemed appropriate by the college.

In addition to holding the community college supervisor credential or other appropriate credential, the supervisor/administrator must meet the following minimum standards:

(a) Hold a master's degree or the equivalent, and

(b) Have two (2) years full time experience or equivalent within the last four (4) years in one or more of the following fields:

(1) Instruction or counseling or both in a program for students with disabilities in higher education; or

(2) Administration of a program for students with disabilities in an institution of higher education; or

(3) Teaching, counseling or administration in secondary education, working predominantly or exclusively in programs for students with disabilities; or

(c) Administrative or supervisory experience in industry, government, public agencies, military or private social welfare organizations in which the responsibilities of the position were predominantly or exclusively for persons with disabilities.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56060. Counselor, Disabled Student Programs and Services.

For the purpose of this section, a counselor of DSP&S shall be defined as a certificated counselor providing academic, personal, and vocational guidance and counseling in accordance with the standards for the Community College Counselor Credential pursuant to Section 52140. The DSP&S counselor shall be further authorized to instruct courses in guidance/counseling or orientation to college and provide intake counseling assessments and/or screenings for students enrolled in DSP&S. In addition, the DSP&S Counselor must meet the following minimum standards:

(a) Hold a Masters degree in Rehabilitation Counseling; or

(b) Hold a Masters degree in counseling, guidance, student personnel, psychology or social welfare, with 12 or more semester units in upper division or graduate level coursework specifically in the education, counseling or rehabilitation of individuals with disabilities; or

(c) Hold a masters degree in a field of special education with completion of 24 semester units of upper division or graduate level coursework with emphasis in counseling, guidance, student personnel, psychology or social welfare; and

(d) Have two (2) years full time experience or equivalent within the last four (4) years in one or more of the following areas:

(1) Counseling and/or guidance for students with disabilities in an institution of higher education; or

(2) Counseling and/or guidance for students with disabilities in secondary education; or

(3) Counseling and/or guidance in industry, government, public agencies, military or private social welfare organizations in which the responsibilities of the position were predominantly or exclusively for persons with disabilities.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56062. Waiver of Minimum Requirements for DSP&S Counselors and Supervisor/Administrator.

A waiver of the minimum requirements for DSP&S counselors and supervisors/administrators may be granted upon request to the Chancellor. The waiver request must be submitted to the Chancellor by the college president or superintendent and must contain a detailed explanation as to why no individual meeting the minimum requirements was available to fill the position. The request must further document that the level of services to disabled students will not be reduced as a result of personnel not meeting minimum requirements, and shall include a description of the actions and estimated timelines the college and/or district expects to undertake in order to employ personnel who will meet the minimum requirements.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56064. Disabled Student Programs and Services Instructor and Services Credential.

Personnel responsible for the provision of instruction and service to students with disabilities must possess the Disabled Student Programs and Services Instructor/ Services Credential defined in Sections 52085-52087 and 56058-56062 of this part.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56066. Authorized Support Staff.

Each community college district may employ non-certificated support staff. Support staff shall function under the direction of certificated persons credentialed in the area for which services and instruction are provided.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

Article 5. Funding

56068. Allocation.

The Board of Governors shall adopt a DSP&S Allocation Formula which includes as elements the number and types of DSP&S eligible students, the number of students served and the funds available. The Chancellor shall annually allocate DSP&S funds to districts for colleges within them in accordance with the DSP&S Allocation Formula as adopted by the Board of Governors.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56070. Criteria for Funding Served Students.

When counting students served for the purposes of funding, each student must meet one or more of the following criteria:

(a) Be enrolled in a regular class and receive three or more contact hours of special services per term; or

(b) Be enrolled in a special class; or

(c) Be enrolled in three or more units of approved independent study, supervised or approved by appropriate college DSP&S staff.

A student is considered enrolled upon completion of the registration process and payment or waiver of fees.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56072. Direct Excess Costs.

Direct excess costs are expenditures which do not duplicate existing college or community resources and are incurred to meet the exceptional needs of students with disabilities through the provision of special classes and/or services. Only the following expenditures may be claimed as Direct Excess Costs:

(a) Special facilities costs which are expenditures for space, equipment or furniture acquired or modified by the district and used by the students.

(b) Educational material costs which are expenditures for material specifically developed or purchased to assist the student in the learning process.

(c) DSP&S Personnel:

(1) Expenditures for certificated persons employed providing student support and/or instructional services;

(2) Classified instructional or service aides and other classified assistants utilized for the provision of instruction and/or services;

(3) Benefits.

(d) Transportation costs which are expenditures for persons, equipment, modifications or related costs for transporting students for educational purposes;

(e) Other instructional or service related expenditures in DSP&S;

(f) Program Accountability and Development Services Funds (PADS) costs which are expended for college, regional and statewide activities for staff and program development which are approved by the Chancellor's Office and designed to implement the provisions of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56074. Non-instructional Cost Rate.

The State approved non-instructional cost rate is determined by dividing the preceding fiscal year's total non-instructional costs by the sum of its non-instructional and direct instructional costs. Non-instructional costs are those fixed administrative and ancillary costs which a college shall compute from the income generated by ADA and special classes.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56076. Determination of Net Apportionment.

The net apportionment for the fiscal year shall be determined by utilizing the apportionment in section 56078 of this chapter. and the non-instructional costs determined by Section 56074 of this chapter.

If program income exceeds expenditures, the non-instructional costs plus the percentage of apportionment in excess of the non-instructional costs returned to the college general fund shall not exceed 50% for on-campus special classes and 20% for off-campus special classes.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56078. Average Daily Attendance Apportionment (ADA) for Classes Offered Through DSP&S.

ADA apportionment for special classes in each District is determined by the following method: The aggregate average cost per unit of ADA is the sum of the units of credit and noncredit classes, divided by the sum of the total amount of apportionment available to the District; this result is then reduced by the total amount of the State approved non-instructional cost rate as defined in Section 56076.

The apportionment funds generated by this process must be expended for special class instruction in accordance with Section 56028 of this chapter.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56080. Determination of Direct Excess Costs.

Direct excess costs, as defined in Section 56072 of this chapter, shall be approved only after special class average daily attendance apportionment and all other funding has been completely utilized. These income sources shall include but not be limited to:

(a) VEA;
(b) Local or college contribution/support;
(c) Federal/state or local assistance grants;

(d) Value of volunteers.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56082. Adjustments to Allocation.

The Chancellor may adjust the allocation of any college during a given fiscal year for one or more of the following reasons:

(a) To adjust for over or under allocated amounts in any of three prior fiscal years;

(b) To adjust for over or under utilization of current allocation;

(c) To adjust for over or under allocation resulting from audits or validations.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56084. District Fiscal Responsibility and Contribution.

Districts shall ensure that colleges under their jurisdiction conducting DSP&S programs provide to disabled students the same programs and services the colleges offer to all enrolled students. The district fiscal responsibility is to fund the cost of such programs and services from resources available to it, except DSP&S funds, at rates for DSP&S students at least equal to the average cost per student served in these programs and services. The district contribution is the amount expended above the district fiscal responsibility. The district contribution will be updated on forms provided by the Chancellor.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56086. Expenses Not Funded.

Funds shall not be provided for the following expenses:

(a) College administrative support costs such as: staff of the college business office, bookstore, reproduction, etc.;

(b) Management, with the exception of DSP&S administrators and/or supervisors who have been assigned responsibilities for DSP&S at no less than 50% of the full-time assignment for day to day activities. In no case shall the amount charged exceed the percent of time assigned;

(c) Indirect costs, such as: heat, light, power and janitorial;

(d) Costs of construction, except for removal or modification of minor architectural barriers, with approval of the Chancellor;

(e) Travel costs for other than DSP&S related activities or functions;

(f) Costs for campus space and plant maintenance.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

56088. Other Support Funds.

Colleges applying for direct funds will certify to the Chancellor that reasonable efforts have been made to secure federal or local funds other than short-term grants for DSP&S.

NOTE: Authority cited: Sections 71020, 78600 and 84850, Education Code. Reference: Sections 78600 and 84850, Education Code.

MINIMUM STANDARDS
Title 5 Requirements

CHAPTER 1. MINIMUM STANDARDS

51000. Scope.

The provisions of this chapter are adopted under the authority of Education Code Section 71025 and comprise the rules and regulations affirming and fixing the minimum standards, satisfaction of which entitles a district maintaining community colleges to receive state aid for the support of their community colleges. The provisions of this chapter are to be distinguished from the regulations contained in Chapter 15 (commencing with Section 51950) of this division. Those regulations constitute minimum standards for the formation and operation of a college which operates pursuant to Education Code Section 78007 and which will not receive or utilize state or local funds.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 66700 and 71025, Education Code.

HISTORY:

1. Repealer of Chapter 1 (Section 51000) and new Chapter 1 (Sections 51000–51021, not consecutive) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29). For history of former Chapter 1, see Registers 81, No. 4 and 77, No. 45.

51002. Standards of Scholarship.

The governing board of a community college district shall:

(a) Adopt regulations consistent with the standards of scholarship adopted by the Board of Governors, as contained in Chapter 9 (commencing with Section 55750) of Division 6 of this part;

(b) File a copy of its regulations, and any amendments thereto, with the Chancellor; and

(c) Substantially comply with its regulations and the regulations of the Board of Governors pertaining to standards of scholarship.

NOTE: Authority cited: Sections 66700, 71025 and 71066, Education Code. Reference: Sections 71025, 71066 and 72285, Education Code.

51004. Degrees and Certificates.

The governing board of a community college district shall:

(a) Adopt regulations consistent with regulations of the Board of Governors pertaining to degrees and certificates, which are contained in Chapter 10 (commencing with Section 55800) of Division 6 of this part;

(b) File a copy of its regulations and any amendments thereto with the Chancellor; and

(c) Substantially comply with its regulations and the regulations of the Board of Governors pertaining to degrees and certificates.

NOTE: Authority cited: Sections 66700, 71025 and 71066, Education Code. Reference: Sections 71025, 71066 and 72285, Education Code.

51006. Open Courses.

(a) The governing board of a community college district shall adopt by resolution the following or a comparable statement: "It is the policy of this district that, unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to regulations contained in Article 1 (commencing with Section 58100) of Chapter 2, Division 9 of Title 5 of the California Administrative Code."

(b) The statement of policy adopted by the board pursuant to subsection (a) of this section shall be published in the official catalog, schedule of classes, and addenda to the schedule of classes for which average daily attendance is reported for state apportionment. A copy of the statement shall also be filed with the Chancellor.

NOTE: Authority cited: Sections 66700, 71025 and 84500.1, Education Code. Reference: Sections 71025 and 84500.1, Education Code.

51008. Comprehensive Plan.

(a) The governing board of a community college district shall establish policies for and approve comprehensive or master plans which include, among other plans, academic master plans and long range master plans for facilities. The content of such plans shall be locally determined, except that they shall also address planning requirements specified by the Board of Governors.

(b) Such plans, as well as any annual updates or changes to such plans, shall be submitted to the Chancellor's Office for review and approval in accordance with Section 71028 of the Education Code and regulations of the Board of Governors pertaining to such plans.

NOTE: Authority cited: Sections 66700, 71025 and 81805, Education Code. Reference: Sections 71025, 71028, 71091, 72231.5, 81820, 81821 and 81822, Education Code.

51010. Affirmative Action.

The governing board of a community college shall:

(a) Adopt a district affirmative action policy which meets the requirements of Section 53002 of this part;

(b) Develop and adopt a district affirmative action plan which meets the requirements of Section 53003 of this part;

(c) Annually survey its employment patterns in the manner required by Section 53004 of this part;

(d) Undertake a program of recruitment as required by Section 53021 of this part; and

(e) Substantially comply with the provisions of Chapter 1 (commencing with Section 53000) of Division 4 of this part.

NOTE: Authority cited: Sections 66700, 71025, 71068 and 87105, Education Code. Reference: Sections 71025, 71068, and Article 4 (commencing with Section 87100) of Chapter 1, Part 51, Education Code.

51012. Student Fees.

The governing board of a community college district may only establish such mandatory student fees as it is expressly authorized to establish by law.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 71025 and 72289, Education Code.

51014. Approval of New Colleges and Educational Centers.

(a) The governing board of a community college district planning the formation of a new college or educational center shall obtain approval of such college or educational center by the Board of Governors. Approval shall be obtained prior to the commencement of classes at the new college or educational center.

(b) The provisions of Chapter 11 (commencing with Section 55825) of Division 6 shall govern the approval of new colleges and educational centers.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 66700 and 71025, Education Code.

51016. Accreditation.

Each community college within a district shall be an accredited institution. Accreditation shall be determined by the Accrediting Commission for Community and Junior Colleges.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 71025, 71026 and 78050, Education Code.

51018. Counseling Programs.

(a) The governing board of a community college district shall adopt regulations and procedures consistent with the provisions of this section. A copy of these regulations and procedures, as well as any amendments, shall be filed with the Chancellor's Office.

(b) The governing board of a community college district shall provide and publicize in each college within the district, an organized and functioning counseling program. Counseling programs shall include, but not be limited to, the following:

(1) Academic counseling, in which the student is assisted in assessing, planning and implementing his or her immediate and long-range academic goals.

(2) Career counseling, in which the student is assisted in assessing his or her aptitudes, abilities, and interests, and is advised concerning the current and future employment trends.

(3) Personal counseling in which the student is assisted with personal, family or other social concerns, when that assistance is related to the student's education.

(4) Coordination with the counseling aspects of other services to students which may exist on the campus, including, but not limited to, those provided in programs for students with special needs, skills testing programs, financial assistance programs, and job placement services.

(c) Counseling services as specified in subparagraphs (1) through (3) of subsection (b) shall be provided to first-time students enrolled for more than six units, students enrolled provisionally and students on academic or progress probation.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 71025 and 72620, Education Code.

51020. Objectives.

Each community college shall have stated objectives for its instructional program and for the functions which it undertakes to perform.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 71025, 71028 and 72231.5, Education Code.

51021. Curriculum.

Each community college shall establish such programs of education and courses as will permit the realization of the objectives and functions of the community college. All courses shall be approved by the Chancellor in the manner provided in Chapter 1 (commencing with Section 55000) of Division 6 of this part.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 71025 and 78200, Education Code.

51022. Instructional Programs.

(a) The governing board of each community college district shall, no later than July 1, 1984, develop, file with the Chancellor, and carry out its policies for the establishment, modification, or discontinuance of courses or programs. Such policies shall incorporate statutory responsibilities regarding program review as specified in Section 78016 of the Education Code.

(b) The governing board of each community college district shall, no later than July 1, 1984, develop, file with the Chancellor, and carry out its policies and procedures to provide that its courses and programs are articulated with proximate four-year colleges and high schools.

NOTE: Authority cited: Sections 66700, 71025 and 78405, Education Code. Reference: Sections 71025, 71070, 78016, 78200 and 78405, Education Code.

HISTORY:

1. New section filed 6-27-84; effective thirtieth day thereafter (Register 84, No. 26).

51023. Faculty.

The governing board of a community college district shall:

(a) Adopt a policy statement on academic freedom, which shall be made available to faculty and filed with the Chancellor.

(b) Adopt procedures which are consistent with the provisions of Sections 53200–53205 of this part, regarding the role of academic senates and faculty councils. Such procedures shall be filed with the Chancellor.

(c) Substantially comply with district adopted policy and procedures adopted pursuant to subsections (a) and (b).

NOTE: Authority cited: Sections 66700, 71025 and 71068, Education Code. Reference: Sections 71025, 71068 and 72292, Education Code.

HISTORY:

1. New section filed 6-27-84; effective thirtieth day thereafter (Register 84, No. 26).

CHAPTER 2. INVESTIGATION AND ENFORCEMENT OF MINIMUM STANDARDS

51100. Review of Colleges.

(a) The Chancellor, at least once each seven years, and at such other times as he or she deems necessary, shall review each community college to determine whether it has met the minimum standards contained in Chapter 1 (commencing with Section 51000) of this Division.

(b) In the event that the Chancellor determines that a visit to the college is necessary to investigate compliance, he or she shall inform the chief executive officer of the district at least one month in advance of such visit, and shall specify the particular minimum standards which will be investigated.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Section 71026, Education Code.

HISTORY:

1. Repealer of Chapter 2 (Sections 51100 and 51101) and new Chapter 2 (Sections 51100 and 51102) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29). For history of former Chapter 2, see Registers 81, No. 52; 77, No. 45; and 71, No. 27.

51102. Enforcement.

(a) If any review pursuant to Section 51100 discloses that a college is not in compliance with the provisions of Chapter 1 (commencing with Section 51000) of this Division, the Chancellor shall notify the chief executive officer of the district in writing, and shall request an official written response from the district by a date which the Chancellor shall specify.

(b) After receiving the district's written response, or after the time for response has lapsed, the Chancellor shall pursue one or more of the following courses of action:

(1) Accept in whole or part the district's response regarding noncompliance;

(2) Require the district to submit and adhere to a plan and timetable for achieving compliance as a condition for continued receipt of state aid;

(3) Withhold all or part of the district's state aid. The amount of withholding shall be related to the extent and gravity of noncompliance, and shall require approval of the Board of Governors.

(c) The Chancellor shall report to the Board of Governors on any actions taken pursuant to subsection (b) of this section; provided that in the event he or she determines to withhold all or a portion of a district's state aid, the Chancellor shall inform and obtain the approval of the Board prior to the withholding.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 71025, 71026 and 84373, Education Code.

CHAPTER 3. FACULTY

NOTE: Authority cited: Sections 71020, 71024 and 71025, Education Code.

HISTORY:

1. Repealer of Chapter 3 (Sections 51200 and 51201) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29). For prior history, see Register 77, No. 45.

CHAPTER 4. STANDARDS OF SCHOLARSHIP

NOTE: Authority cited: Section 71020, 71025 and 71066, Education Code. Reference: Sections 71066, 72285 and 76000, Education Code.

HISTORY:

1. Repealer of Chapter 4 (Sections 51300–51319, not consecutive) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29). For history of former Chapter 4, see Registers 82, No. 20; 80, No. 19; 80, No. 11; 77, No. 45; and 71, No. 27.

CHAPTER 5. FACILITIES

HISTORY:

1. Repealer of Chapter 5 (Sections 51400 and 51401) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29).

CHAPTER 6. COUNSELING SERVICES

HISTORY:

1. Repealer of Chapter 6 (Sections 51500–51503) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29). For prior history, see Register 77, No. 45.

CHAPTER 7. DEGREES AND CERTIFICATES

HISTORY:

1. Repealer of Chapter 7 (Sections 51600–51606) filed 11-4-77; effective thirtieth day thereafter (Register 77, No. 45). For prior history, see Register 71, No. 40.

CHAPTER 8. DEGREES AND CERTIFICATES

NOTE: Authority cited: Sections 66700, 71020 and 71066, Education Code. Reference: Sections 66701, 71066 and 72285, Education Code.

HISTORY:

1. New Chapter 8 (§§ 51620 through 51626) filed 10-1-71; effective thirtieth day thereafter (Register 71, No. 40).
2. Amendment of section and NOTE filed 11-4-77; effective thirtieth day thereafter (Register 77, No. 45).
3. Amendment filed 6-9-82; designated effective 7-1-83 (Register 82, No. 24).
4. Repealer of Chapter 8 (Sections 51620–51629) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29).

CHAPTER 9. MINIMUM CLASS SIZE

NOTE: Authority cited for Chapter 9: Section 71027, Education Code.

HISTORY:

1. New Chapter (§§ 51700 through 51703) filed 11-12-71; effective thirtieth day thereafter (Register 71, No. 46).
2. Amendment of NOTE filed 11-4-77; effective thirtieth day thereafter (Register 77, No. 45).
3. Repealer of Chapter 9 (Sections 51700–51703) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29).

CHAPTER 10. NEW COLLEGES AND EDUCATIONAL CENTERS

HISTORY:

1. New Chapter 10 (Sections 51800–51808, not consecutive) filed 6-27-75; effective thirtieth day thereafter (Register 75, No. 26).
2. Amendment filed 3-18-77; effective thirtieth day thereafter (Register 77, No. 12).
3. Amendment of section and NOTE filed 11-4-77; effective thirtieth day thereafter (Register 77, No. 45).
4. Amendment of subsection (a) filed 11-15-79; effective thirtieth day thereafter (Register 79, No. 46).
5. Repealer of Chapter 10 (Sections 51800–51808, not consecutive) filed 7-13-83; effective thirtieth day thereafter (Register 83, No. 29).

CHAPTER 11. OPEN COURSES

NOTE: Authority cited: Sections 71020, 78452 and 84500, Education Code. Reference Sections 78452 and 84500, Education Code.

HISTORY:

1. New Chapter 11 (Sections 51820–51826) filed 12-17-76; effective thirtieth day thereafter (Register 76, No. 51).
2. Amendment of NOTE filed 11-4-77; effective thirtieth day thereafter (Register 77, No. 45).
3. Repealer of Chapter 11 (Sections 51820–51826) filed 7-29-82; effective thirtieth day thereafter (Register 82, No. 31).

CHAPTER 15. MINIMUM STANDARDS FOR COLLEGES OPERATING PURSUANT TO EDUCATION CODE SECTION 78007 AND NOT RECEIVING OR UTILIZING STATE OR LOCAL FUNDS

Article 1. General Provisions

51950. Intent.

(a) The regulations contained in this chapter constitute minimum standards for the formation and operation of a college which offers programs pursuant to Education Code Section 78007, which will not receive or utilize state or local funds, and which will be part of an existing public community college district. The regulations contained in this chapter are not intended to constitute the entire set of regulations with which such colleges must comply; nor are these regulations intended to supersede or otherwise make inapplicable provisions of the Education Code related to requirements placed upon public community colleges. Instead, these regulations constitute minimum conditions for the formation and operation of such a college.

(b) The word "college" as used in this chapter refers to a community college which is part of an existing public community college district.

NOTE: Authority cited: Sections 66700, 71020, 71062, 71066, 71068, and 87105, Education Code. Reference: Sections 66700, 71062, 71066, 71068, 78200, 78401, and 87100–87106, Education Code.

HISTORY:

1. New Chapter 15 (Articles 1–10, Sections 51950–51996) filed 1-23-81; effective thirtieth day thereafter (Register 81, No. 4)

51951. Receipt or Use of State and Local Funds.

(a) The regulations contained in this chapter are intended to apply only to those colleges which will not receive or utilize state and local funds to support their operations and which exist to provide educational programs authorized by Section 78007 of the Education Code. If a college wishes to receive or utilize state funds to support its operations, it must obtain prior approval of the Chancellor and demonstrate compliance with all other provisions of this division.

(b) For the purposes of this chapter, "local funds" are defined as those revenues derived from local taxes.

NOTE: Authority cited: Sections 66700 and 71025, Education Code. Reference: Sections 66700, 71020, 71025 and 71062, Education Code.

51952. Discrimination.

Each college shall provide access to its services, classes, and programs without regard to race, religious creed, color, national origin, ancestry, handicap or sex.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Sections 66700, 71062 and 72013, Education Code.

51953. Approval.

(a) A community college district proposing to create and operate a college pursuant to this chapter shall obtain the prior approval of the Board of Governors. The procedures specified in Chapter 10 (commencing with Section 51800) of this division shall govern the submission, review, and approval or disapproval of the application for the proposed college.

(b) In addition, no college shall be approved to operate pursuant to the provisions of this chapter until the district of which it is a part has demonstrated to the Chancellor's satisfaction that the proposed college has established procedures to insure that it will be in compliance with the provisions of this chapter.

NOTE: Authority cited: Sections 66700, 71020, 71062, Education Code. Reference: Sections 66700 and 71062, Education Code.

Article 2. Instructional Program

51955. Objectives.

Each college shall have stated objectives for its instructional program and for the functions which it undertakes to perform.

NOTE: Authority cited: Sections 66700, 71020, 71028 and 71062, Education Code. Reference: Sections 66700, 72231.5, and 72283, Education Code.

51956. Curriculum.

Each college shall establish such programs of education and courses as will permit the realization of the objectives and functions of the college. All courses and programs shall be approved by the Chancellor in the manner provided in Chapter 2 (commencing with Section 55000) of Division 6 of this part.

NOTE: Authority cited: Sections 66700, 71020, 71028 and 71062, Education Code. Reference: Sections 66700, 71028, 72231.5, 72283, 78200, 78401, Education Code.

51957. Identification of Courses.

For each course offered, a college shall make available to students through college publications at least all of the following facts before he or she enrolls in the course:

(a) Whether the course if offered on the basis of credit-no credit and, if so, which provision of subsection (a) of Section 51302 of this part is applicable.

(b) Whether the course is other than a graded or credit course.

(c) Whether the course is a college credit course under the provisions of Section 51103 of this part.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Sections 66700, 71020 and 72283, Education Code.

51958. College Credit Course.

A "college credit course" is a course given in a college which meets one or more of the following requirements:

(a) The course is part of an approved educational program.

(b) The credit awarded by the college for completion of the course is accepted as completion of a portion of an appropriate educational sequence leading to an associate degree or baccalaureate degree by one or more of the following:

(1) The University of California
(2) A California State College
(3) An accredited independent college or university.

NOTE: Authority cited: Sections 66700, 71020, 71027 and 71062, Education Code. Reference: Sections 66700 and 71027, Education Code.

Article 3. Faculty

51963. Faculty Personnel.

(a) Each college shall employ an adequate teaching staff showing adequate scholarship, experience, and teaching ability for each major field of the curriculum. For the purposes of this chapter, Section 54188 of this part shall be applicable in determining whether an instructor is an employee of the college

(b) Unless expressly exempted by law, all instructors must be appropriately certificated.

(c) The performance of each instructor shall be evaluated in accordance with district rules and regulations.

NOTE: Authority cited: Sections 66700, 71020, 71062 and 71068, Education Code. Reference: Sections 66700, 71068 and 72208, Education Code.

51964. Conditions of Instruction.

Each college shall employ a sufficient number of faculty members to enable the students to receive individual guidance and assistance in learning and to permit the continued professional growth of the faculty members.

NOTE: Authority cited: Sections 66700, 71020, 71062 and 71068, Education Code. Reference: Sections 66700, 71020 and 71062, Education Code.

51965. Employment Affirmative Action.

Each college shall be addressed by and made subject to affirmative action policies and plans adopted by its district, which policies and plans shall be consistent with the provisions of Chapter 1 (commencing with Section 53000) of Division 4 of this part.

NOTE: Authority cited: Sections 66700, 71020, 71062 and 87105, Education Code. Reference: Sections 66700 and 87101–87106, Education Code.

Article 4. Standards of Scholarship

51967. Grading Practices.

Each college shall implement and comply with regulations adopted by its district regarding grading practices, which regulations shall be in compliance with the provisions of Chapter 4 (commencing with Section 51300) of this division.

NOTE: Authority cited: Sections 66700, 71020, 71062 and 71066, Education Code. Reference: Sections 66700, 71066 and 72285, Education Code.

Article 5. Facilities

51970. Library.

Each college shall have or make available adequate working collections of books for each major field of the curriculum. New acquisitions shall be made in accordance with student enrollments.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Section 66700, Education Code.

51971. Facilities for Certain Courses.

Each college shall have or insure provision of adequate equipment, materials, and furnishings for courses offered in agriculture, business and commercial education, fine arts, home economics, industrial and technical training, music, natural and physical sciences, and physical and health education.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Section 66700, Education Code.

Article 6. Student Services

51975. Counseling Services.

(a) Each college shall employ or insure provision of an adequate counseling staff, both in training and experience, and shall establish procedures to provide, and shall provide, the counseling services listed in subsections (b) through (d).

(b) The counseling services shall assist each student in the college in the following ways:

(1) To determine the student's educational goals.

(2) To make a self-appraisal toward progress toward the student's goals.

(c) The counseling services shall provide to each first-time freshman described in subdivisions (1) and (2) below, who is enrolled in more than six units, special individual or group counseling and guidance, shall arrange a study load suitable to the needs of each such student, and shall keep an appropriate record of each such student.

(1) The student is a high school graduate, whose scores on a qualifying test or tests were below an acceptable minimum for the college of attendance, and whose grade point average in the last three years in high school was less than 2.0 (grade C on a five point scale with zero for an F grade), excluding only physical education and military science; or

(2) The student is not a high school graduate, and the student's scores on a qualifying test or tests were below an acceptable minimum for the college of attendance and the student's grade point average in the years of high school attendance was less than 2.0 (grade C on a five point scale with zero for an F grade), excluding only physical education and military science.

(d) The counseling service shall provide to each student who is on probation individual counseling and guidance service, including the regulation of the student's program according to the student's aptitude and achievements.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Sections 66700 and 72620, Education Code.

51976. Health Services.

The student health services needs for each college shall be addressed in its district's student health services plan required pursuant to Sections 51710 and 51712 of this part. The purpose of this plan is to insure that diligent care is given to the health and physical development of students.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Sections 66700 and 76400, Education Code.

51977. Student Conduct and Expression.

(a) Each college shall implement and comply with regulations governing student conduct as adopted by its district.

(b) Each college shall insure students the opportunity to express their opinions.

NOTE: Authority cited: Sections 66700, 71020, 71062 and 71079, Education Code. Reference: Sections 66700 and 72292, Education Code.

51978. Student Records.

Each college shall implement and comply with regulations adopted by its district regarding student records, which regulations shall be in compliance with the provisions of Chapter 6 (commencing with Section 54600) of Division 5 of this part.

NOTE: Authority cited: Sections 66700, 71020, 71062, 76220, 76225 and 76246, Education Code. Reference: Sections 66700 and 76200–76246, Education Code.

Article 7. Finances

51980. Fees.

(a) A student enrolled in a class which is not eligible for state apportionments may be required to pay a fee for such class. The total revenues derived from the fee shall not exceed the estimated cost of all such classes maintained.

(b) Except for community service classes, no instructional fee or other form of tuition may be charged of any California resident for attending a class within the boundaries of California.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Sections 66700 and 78462.5, Education Code.

51981. Budget and Accounting Procedures.

Each college shall comply with applicable provisions of the Budget and Accounting Manual for California Community Colleges.

NOTE: Authority cited: Sections 66700, 71020, 71062, 71073 and 84004, Education Code. Reference: Sections 66700, 71073 and 84004, Education Code.

Article 8. Degrees and Certificates

51985. Degrees and Certificates.

Each college shall grant degrees and certificates in accordance with regulations adopted by its district, which regulations must be consistent with the provisions of Chapter 10 (commencing with Section 55800) of Division 6.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Sections 66700, 71073 and 84004, Education Code.

HISTORY:

1. Amendment filed 3-3-86; effective thirtieth day thereafter (Register 86, No. 10).

Article 9. District Responsibilities

51987. Master Plans.

Master plans submitted by districts to the Chancellor shall include master planning for colleges established and operating subject to the provisions of this chapter.

NOTE: Authority cited: Sections 66700, 71020, 71028 and 71062, Education Code. Reference: Sections 66700, 71028 and 72231.5.

51988. Audits.

Annual district audits required by Section 84040 of the Education Code shall include any college operating subject to the provisions of this chapter, as well as any auxiliary organization or foundation serving such college.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Sections 66700 and 84040, Education Code.

51989. Budget.

The budget of each college operating pursuant to the provisions of this chapter, as well as the budget of any auxiliary organization or foundation serving such college, shall be included in the budget of its district, which shall be submitted to the Chancellor as required by law.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Sections 66700, 85021 and 85023, Education Code.

51990. Reports.

Each community college district shall report, at such times and in such manner as deemed necessary by the Chancellor, on the operations or activities of its colleges which are operating subject to the provisions of this chapter.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Section 66700, Education Code.

Article 10. Compliance

51996. Compliance Reviews and Sanctions.

(a) The Chancellor shall review each college which has been approved to operate pursuant to the provisions of this chapter for compliance with the minimum standards contained in this chapter. The initial review of a college shall be conducted after the first complete fiscal year of operation; and annually thereafter for each of next two years. Subsequent reviews shall be conducted periodically. The college or district of which it is a part shall enter into an agreement with the Chancellor's Office whereby the college agrees to pay for or provide for the travel and meals of persons engaged in on-site compliance reviews.

(b) If such review discloses that such college is not in compliance with the provisions of this chapter, the Chancellor shall seek an official response from the college regarding noncompliance and subsequently pursue one or more of the following courses of action:

(1) Accept in whole or part the college's response regarding noncompliance; or

(2) Require the college to submit and adhere to a plan and timetable for achieving compliance as a condition of continued approval of the college; or

(3) Revoke approval of the college, to commence on a specified future date.

(4) Prior to the effective date of revocation the Chancellor shall notify the Board of Governors and provide the concerned district with an opportunity to appeal the decision to the Board of Governors. A revocation of approval shall be stayed during the pendency of any appeal to the Board of Governors.

(c) In addition to the reviews required by subsection (a), any college established pursuant to the provisions of this chapter must, upon the anniversary of approval for each of the first three years of such approval, submit to its local board and to the Chancellor an audit of the college's finances including a future financial plan, a report on efforts to evaluate the quality of educational offerings and such other reports as the Chancellor deems appropriate.

At the end of such three year period, the Chancellor shall report to the Board of Governors, on the basis of the three annual reports and such reviews as may have been completed, concerning the approval status of the college so that the Board of Governors may determine whether such approval status should be continued; provided, however, that nothing in this subsection shall modify such authority that the Board of Governors or the Chancellor may have under these regulations and the laws of the state with respect to such college.

NOTE: Authority cited: Sections 66700, 71020 and 71062, Education Code. Reference: Section 66700, Education Code.

REQUISITES
Board of Governors Policy
January 1987

Board of Governors of the
California Community Colleges
January 22, 1987

PROPOSALS FOR STRENGTHENING ACADEMIC STANDARDS

4

For Action

Summary

Over the past few years the Board has increasingly exercised its statutory responsibility "to provide leadership and direction" to community colleges in the arenas of educational policies and academic standards. This item extends the Board's interests in these areas by proposing the adoption of four major academic standards policies which were identified in a formalized consultation with colleges in spring 1986. Proposed policies were presented to the Board as information in October 1986 and have been refined through the benefit of information consultation and written input during the past two months. The policies are closely related to the implementation of matriculation and should, with the exception of Policy Statement #3, concerning student progress standards, be phased in over the three years that matriculation will be evaluated.

The four policies:

1. Define community college responsibilities for Pre-collegiate Basic Skills Instruction and Adult Basic Education, respectively;

2. Require colleges to establish skills requisites for entry-level certificate- and degree-applicable courses;

3. Require upgrading and enforcement of student progress standards and the placing of a 30-semester (45-quarter) unit limit on enrollment in pre-collegiate basic skills courses; and

4. Define the scope of student assessment programs required of the colleges.

The final section of the item proposes specific implementation strategies and timelines.

Recommended Action

The Instructional Policy Committee should recommend that the full Board adopt Policy Statements 1, 2, 3 and 4 as stated in this item and direct the Chancellor to implement them in accordance with the Board Implementation Directives related to each.

Staff Presentation:	*Ronnald W. Farland, Acting Associate Vice Chancellor* *Academic Affairs*
	Rita Cepeda, Acting Dean *Academic Standards and Basic Skills*

Background

From its inception in 1967, the Board of Governors has been charged in statute to "provide leadership and direction" to the State's community colleges. Over the past three years the Board has seen fit, in the interest of maintaining educational excellence, to exercise that authority increasingly in the arenas of educational policies and academic standards.

In 1980, the Board established for the first time a statewide uniform grading system and attendant standards of student progress. In 1984 it embraced the concept of a more systematic process of entrance assessment, advisement, course placement and follow-up counseling by adopting as Board policy *Student Matriculation: A Plan for Implementation in the California Community Colleges*. In May 1985 the Board adopted a policy statement defining the nature and purpose of remedial instruction and services in community colleges and also endorsed Title 5 regulations which upgraded standards of rigor for the conduct of degree-applicable credit courses, and established a clear line of demarcation between these degree-applicable courses and non-degree applicable remedial and developmental coursework (i.e., basic skills instruction).[1] Later that same year the Board extended its influence in educational policy matters by adopting a policy resolution which: 1) reaffirmed its commitment to open access to the colleges; 2) established a new companion policy of "conditional access" to degree and certificate courses; 3) declared that "the primary mission of the colleges is to offer collegiate level degree and certificate courses and programs"; and 4) rejected the concept of a "floor" on basic skills instruction.

That December 1985 policy resolution also directed staff to undertake systemwide consultation concerning implementation of the resolution and other issues raised before the Board at that time. The consultation was conducted during March-May 1986, and in July the Board received a preliminary report on the findings. In general, the consultation found that:

1. The issues raised in the consultation process are not viewed as being limited to the purposes of the December 1985 policy resolution (i.e., to basic skills instruction policies). Rather, they are regarded as the "logical next steps" which follow from several of the Board's earlier actions (as noted above) and which are consistent with the recommendations of the Master Plan Review Commission;

2. From the respondents' perspectives, these issues collectively form the basis from which to formulate a coherent body of Board educational policy and there is an implied logical sequence for their resolution;

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[1] Because of revisions required by the Office of Administrative Law, these regulations were acted upon a second time in September 1986. The regulations must be implemented in the colleges no later than July 1, 1988.

3. While there is at least majority consensus on how each issue should be resolved, there is also widespread concern that adequate resources and implementation timelines be provided to the colleges to do so. Inherent in this concern is a fear that too rapidly implemented or inadequately funded "reforms" may inadvertently have negative initial effects on the enrollment of underrepresented minority students.

In short, there is broad consensus that the Board should act to flesh out the coherent state educational policy it has initiated, so long as implementation is approached with care, particularly in regard to possible negative effects on minority student enrollment.

Subsequent to receiving the preliminary report on the consultation, the Board directed staff to propose formal policy statements in each area for Board adoption and also to recommend implementation strategies for each. In October 1986, the Board reviewed draft policy statements and strategies and heard testimony concerning them. During November and December, staff received additional written comments from 19 colleges and participated in seven formal consultation sessions with the Chief Executive Officers, Academic Senate and Chief Instructional Officers. Using this advice and the counsel of the Chancellor's Cabinet, staff have developed the policy proposals which follow.

Proposed Policies

Education Code, Section 71023, contains the basic charge to the Board of Governors for overseeing California's community colleges. It reads as follows:

> *It is the intent of the Legislature that the Board of Governors...shall provide leadership and direction in the continuing development of community colleges as an integral and effective element in the structure of public higher education in the state. The work of the board shall at all times be directed to maintaining and continuing, to the maximum degree possible, local autonomy and control in the administration of the community colleges.*

For nearly a decade after its creation in 1967 the Board, burdened with otherwise incomplete and conflicting statutory provisions concerning its governance role,[2] chose to put its emphasis on the second sentence of that basic charge, giving local boards great latitude in determining what the educational scope, standards and "modus operandi" of the colleges would be. As a consequence, it is not surprising that local districts, in what was generally a period of prosperity and expansion, took up the cause of the "comprehensive community college" and developed programs, policies and practices which were diverse and uniquely suited to local constituencies and circumstances. For example, some used the legal provisions for mutual agreements with high school districts to delineate their collegiate functions from noncredit programs for adults; others accommodated aspects of the expanding mission in the colleges themselves. A few retained skills prerequisites for enrollment in at least some basic, transfer curricula; but most interpreted the "open door" as calling for full access to all curricula regardless of requisite skills. And, to varying degrees, some maintained a curricular focus on certificate and degree programs while others came to regard the curriculum "in toto" as a vehicle for lifelong learning, shaped chiefly by student choice and motivation.

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[2] See *Understanding Community College Governance*, Chancellery, Office of Legal Affairs, April 1986.

By the late 1970's, however, state level concerns for student equity and fiscal restraint began to challenge this diversity as questionable public policy. And, sharpened by the 1978 shift in funding source from chiefly local to chiefly state financing, the public policy challenges in the early 1980's began to hone in on "redefining the mission" of community colleges and restoring "academic excellence."

The Board, in response to these public policy concerns about the colleges, has increasingly exercised its authority to restore a semblance of consistency to the educational priorities and practices of the colleges. The initial steps planned in 1987 toward implementation of mandatory student assessment, placement and follow-up (i.e., matriculation) marks a major step forward in that effort. But implementation of matriculation also brings with it new challenges to the Board; challenges that will require it to face squarely the question of how far it needs to or should go in bringing into conformity the diverse educational policies and practices that this history has permitted the colleges to develop. The policy statements presented below are bold in that regard. Their implementation will require considerable time, patience and hard work. The implementation timelines proposed below are intended to accommodate the effort.

POLICY STATEMENT #1: *Defining Community College Responsibilities in Pre-collegiate Basic Skills Instruction and Adult Basic Education*

It is the policy of the Board of Governors that:

a) **All community colleges shall make available, in the non-degree applicable credit mode (Title 5, Section 55002(b), as amended September 1986), the full range of pre-collegiate basic skills instruction needed to correct the skills deficiencies of those students who enroll with an intent to complete degree and certificate courses and/or programs. The "full range," as applied to the skills to be addressed, is defined as courses designed to correct English reading and writing skills deficiencies and computational skills deficiencies of students assessed as not meeting the skills requisites for certificate and degree applicable courses which** have been recommended by the faculty through the college and/or district curriculum committee and approved by the local board. Development of critical thinking skills shall also be an objective of such courses.

The "full range," as applied to skills levels to be included, is defined as courses that address the range of skills deficiencies exhibited by students in the college's mandatory assessment processes, implemented in conjunction with matriculation. The pre-collegiate basic skills curricula shall be sequenced by levels and shall be taught with a rigor and intensity that meet the standards of Title 5, Section 55002(b) and that are designed to build students' skills to meet the certificate and degree course requisites. A student may not exceed a maximum of 30 semester units or 45 quarter units to meet all the necessary skills requisites.

It is further policy of the Board that :

b) Community colleges may, within the constraints established for adult basic education (Education Code, 84711; Title 5, Section 55002(c); et al.), offer additional skills instruction in the noncredit mode which is designed for purposes other than building skills to the college level, such as for citizenship and daily living skills. Colleges that do not offer such noncredit instruction shall seek formal articulation agreements with local adult schools to accommodate the appropriate referral of students not successful in or not suited for the pre-collegiate basic skills curriculum.

c) Community colleges should not count instruction in English as a Second Language (ESL) or special instruction for disabled students in the 30/45 unit limit.

d) Community colleges shall regularly and routinely evaluate the effectiveness of their pre-collegiate basic skills curricula in terms of specified student outcomes. Reports to the Chancellor of the results of these evaluations shall be accommodated within the required evaluation of matriculation.

e) The Board shall, within three years of the implementation of these policies in the colleges, review these policies using the colleges' evaluation reports and, as necessary, revise the policies herein. This review shall be conducted using the Chancellor's consultation process.

BOARD IMPLEMENTATION DIRECTIVE:

The Board directs the Chancellor to monitor the implementation of Policy Statement #1 in the colleges by incorporating necessary reporting requirements into the processes used for implementing Student Matriculation. Specifically, beginning in 1988-89 each matriculation plan should contain a description of the pre-collegiate basic skills curriculum the college will offer and an explanation of how components of that program relate to the range of skills deficiencies and needs identified in the assessment process. In addition, data reporting required for the contracted evaluation of matriculation should include all elements necessary for evaluation of basic skills curricula.

Discussion

The place of basic skills instruction (or "remediation") in the mission of community colleges has been a subject of intense debate. In the past year, however, substantial public policy consensus has been achieved in the sense that the recommendation of the Master Plan Commission and the recent drafts of the Joint Legislative Committee's report both support the Board's own position; that is, that such instruction is a necessary function of the mission because it is the mechanism by which underprepared students may gain access to the primary functions of transfer and vocational programs.

Despite the strengthening consensus that this function is necessary, the question of how much basic skills instruction should be provided by the colleges remains controversial. Twice during 1985 the Board reviewed evidence which led it to reject the idea of establishing a uniform, statewide "skills floor" below which colleges would not attempt to provide remediation. In December 1985, staff suggested that since remediation, as a mission function, is ancillary to the primary functions of transfer and vocational education the Board might, in the interest of making maximum use of public resources, want to limit its provision in ways other than establishing a "floor." Specifically, it was suggested that a limit might be set either by upgrading student progress standards or by establishing a limit on the number of units of basic skills a student can take. Subsequently, the Master Plan Review Commission (and the drafts of the Joint Legislative Committee's report) recommended that both actions be taken; and the consultation undertaken to develop these policy statements confirmed that a majority of respondents from the colleges also favor both the enforcement of student progress standards for basic skills students and an ultimate unit limit as well. (Also see Policy Statement #3.)

Adoption of this policy statement would put to rest two major issues that have plagued the Board in its efforts to develop coherent state policies concerning the colleges' roles in addressing adult literacy needs. This policy: 1) distinguishes instruction in the nondegree applicable credit and noncredit modes on the basis of differences in both purpose and standards of conduct, and gives each a distinctive, meaningful "name" (i.e., "pre-collegiate basic skills instruction" and "adult basic education"), and 2) addresses the "skills floor" issue by delegating to the college the responsibility for identifying and providing the range of skills instruction needed by its particular student constituency according to a method common to all colleges and approved by the Chancellor as a component of matriculation plans. In addition, it conforms to the Board's stated desire for accountability for public resources by placing a reasonable limit on the amount of remediation a student may take (see also Policy Statement #3) and by committing, as necessary, to later revision of the policy standards, based upon the results of systematic evaluations by the colleges. In all these respects the statement is also consistent with the recent recommendations of the Commission to Review the Master Plan.

Further, the creation of the "pre-collegiate" mode for the single purpose of attaining specified, collegiate level skills and distinguishing that from traditional adult basic education is consistent with state actions in New Jersey, New York and Florida and with the trend in practices of colleges in other states (e.g. Illinois).

It should be noted also that the statement explicitly excludes ESL instruction and special classes for the disabled from the 30/45 unit limit. ESL is currently discounted altogether in the 30 unit limit on non-degree courses used by the federal government in determining eligibility for financial aid. This policy is based on the idea that the need for such instruction is a condition above and beyond the need for basic skills instruction in English. A similar argument can be made for the special classes for the disabled.

At the same time, adoption of the policy statement will be highly controversial in at least two respects. First, as the Board is aware from previous presentations, there is currently little consistency from district to district in how basic skills instruction is assigned to the noncredit or nondegree applicable credit modes. Further, although there is a developing consensus among professionals that the distinction should be based on differences in the purposes and rigor of instruction, rather than on the levels of students' initial skills, there is by no means broad consensus on that point. Current district practices of assigning skills instruction to the two modes appear to be based more on fiscal considerations and the histories of their relationships with local adult schools. To mandate the provision of the full range of pre-collegiate basic skills instruction in the non-degree applicable credit mode would require significant restructuring of curricula in some districts and, in turn, create varying fiscal impacts. Among those districts currently at or near their enrollment caps, the action could result in new State-mandated costs. The Board has requested $21.2 million in its 1987-88 budget to meet this particular contingency.

The second area of potential controversy has to do with permitting individual colleges to establish their own ranges of skills instruction rather than setting a uniform, statewide requirement. Since colleges' student constituencies vary with respect to skills deficiencies, there would no doubt be some differences in the types, amounts and ranges of pre-collegiate basic skills instruction colleges would find it necessary to provide. To some this may raise a question of equity. At the same time, however, it is virtually impossible to define a statewide requirement without resorting to use of grade-level equivalency "cut-offs," a concept that is not only of questionable legal standing but one that assumes unfounded validity and reliability of assessment tests and overlooks differences in colleges' needs. In practice, it would likely result, in some colleges, in provision of unnecessary courses.

POLICY STATEMENT #2: *Establishing Requisites for Entry-level Certificate and Degree Applicable Courses and for Levels of Pre-Collegiate Basic Skills Instruction*

It is the policy of the Board of Governors that:

a) **Community colleges shall establish minimum skill and/or competency requisites for enrollment in entry-level degree- and certificate-applicable courses and in courses at each level of the pre-collegiate basic skills curriculum. The skill and competency requisites shall be recommended by the faculty through the college and/or district curriculum committee, as defined in Title 5, Section 55002(a)(1), and approved by the local board. The requisites shall be based upon systematically derived evidence of a relationship between student assessment measures and students' performance in the course. (Also see Policy Statement #4.) A requisite may not be defined in such a way as to exclude a student from participation in a course on the basis of a single test score. Some courses may be exempted from having any reading, writing, computational or critical thinking requisite if systematically derived evidence demonstrates that such skills are not necessary for successful performance in the course.**

b) **The Board shall, within three years of the full implementation of this policy in the colleges, review the policies and practices of the colleges and, as necessary, revise its own policy statement. This review shall be conducted using the Chancellor's consultation process.**

BOARD IMPLEMENTATION DIRECTIVE:

The Board directs the Chancellor to monitor the implementation of Policy Statement #2 in the colleges by incorporating necessary reporting requirements into the processes used to implement Student Matriculation. Specifically, each matriculation plan should contain the skills requisites the college intends to maintain, the rationale and methodology used to derive them and any other evidence necessary to document that requirements of this policy have been met.

Discussion

The revisions to Title 5, Sections 55002(a) and 55805.5 approved by the Board in September 1986 directed colleges to establish "language and/or computational skills" requisites for degree- and certificate-applicable courses when such requisites are "deemed by the college and/or district curriculum committee as necessary for success in such courses." The policy statement above would extend that directive to include requisites for non-degree applicable courses in the pre-collegiate basic skills curriculum and also permit other types of skills to be considered in the setting of requisites. Further, the statement establishes some essential factors that curriculum committees would be required to observe in order to "deem" a particular requisite to be "necessary"; namely, 1) evidence of a relationship between any assessment outcome measures used to define the requisite and the performance of students in the course, and 2) the requirement that requisites be based upon more than a single test score.

Some colleges have always maintained skills requisites for enrollment in at least a few courses (e.g. the freshman English composition course) and, in turn, have made successful completion of those courses requisite to certain other degree applicable courses throughout the curriculum. In the past few years, even before the Board's passage of the Title 5 course standards revisions referred to above, many other colleges began to expand the use of course requisites. According to two separate studies reported in early 1986,[3] a little more than half the colleges had either completed or were underway with such efforts. According to one of those studies, however, only one in four of such colleges indicated that it was establishing its requisites on the basis of any systematic research. About half acknowledged that their requisites were based upon the collective judgments of faculty and/or administrative decision-making bodies. Therefore, adoption of Policy Statement #2 above would require many colleges that have already established course requisites to review and validate their earlier actions and require all other colleges to mount substantial new research efforts to support their course requisite determination processes. Although matriculation funding will provide some resources for institutional research, many districts would need to increase their research capacity substantially.

Further, requiring hard evidence to support the relationship between course requisites and student performance in the course assumes a period of time during which colleges gather student assessment data but do not enforce course requisites. At the least, the requirement assumes colleges can selectively enforce requisites in order to conduct controlled research. This situation argues for a phase-in of the policy over two or three years.

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[3] Woods, Jacqueline, *Status of Testing Practices at Two-Year Postsecondary Institutions*, ACT and AACJC, Washington D.C., 1985; and Kangas, Jon A., *Academic Standards and Matriculation: A Summary of Practices in the California Community Colleges*, Volume I., Learning Assessment Retention Consortium, San Jose, 1985.

Finally, the requirement that course requisites be based on more than a single test score is consistent with the broadly defined scope of assessment required in the Board's 1984 matriculation plan and with the 1986 updated matriculation implementation plan. Those plans require that assessment include not only measures (tests) of language and computational skills but also some consideration of students' aptitudes, study skills, educational goals and support service needs. The rationale for requiring this broad scope is that a standardized test alone cannot reveal all the factors that contribute to students' success or failure in classes and, in some cases, such tests may in fact lead to erroneous conclusions about students due to their insensitivity to linguistic and cultural differences or to certain disabilities.

Under the proposed policy, colleges would have considerable leeway to determine how to account for multiple factors (e.g. multiple criterion formulas, waiver or appeals processes, "decision zones" on test score ranges, etc.), subject to approval in the matriculation plan. The Board should also be aware that the "more than a single test score" requirement is also necessitated by the fact that a large and growing body of case law has developed around what is called the "sole criterion" issue. Since 1965, over 3000 cases have been heard which deal with the subject of alleged discriminatory selection based on use of a single measure of competence. Initially an issue in employment discrimination, most of the cases in the "sole criterion" literature in the past ten years have dealt with college admission, selection and placement. (See also Policy Statement #4.)

POLICY STATEMENT #3: *Refining and Enforcing Student Progress Standards*

It is the policy of the Board of Governors that:

a) **Students enrolled in pre-collegiate basic skills instruction shall be subject to the same term-to-term standards of academic progress, probation, dismissal and return rights as are all other students enrolled in degree-applicable credit offerings (Administrative Code, Title 5, Chapter 9, Section 55750 ff). However, except as specified below, no student may take more than 30 semester units (45 quarter units) in the pre-collegiate basic skills curriculum in order to meet the skills requisites for all courses that would be required to complete her/his chosen degree or certificate program or other educational objective. Students who do not attain full eligibility status within this limit shall be dismissed, with referral to noncredit adult basic education courses when such referral is deemed appropriate.**

b) **Each district board shall adopt for its college(s) policies and procedures of appeal and/or waiver of the unit limitation on enrollment in pre-collegiate basic skills instruction. Such policies and procedures shall be developed in broad consultation with faculty and staff, including the local academic senate.**

c) Each college shall have the capacity to effectively monitor and enforce the academic progress, probation, dismissal and return rights standards established by the Board of Governors.

BOARD IMPLEMENTATION DIRECTIVE:

(a) *The Board directs the Chancellor to develop, with appropriate field consultation, proposed amendments to Title 5 regulations which will:*

  1) *revise as necessary the existing standards for dismissal of students on probation;*

  2) *establish a standard for readmission of students who have been dismissed;*

  3) *establish a 30-semester-unit (45-quarter-unit) limit on enrollment in pre-collegiate basic skills instruction (i.e., subsection (a) of Policy Statement #3).*

The Board further directs the Chancellor to propose these amendments for adoption by September 1987 in order that they may be implemented in the colleges by 1988.

(b) *The Board directs the Chancellor to develop, staff and carry out a thorough and systematic compliance review process to assure that:*

  1) *all colleges are systematically enforcing student placement, academic progress, probation, dismissal and return rights standards, and*

  2) *policies and practices within and across colleges/districts assure equitable treatment of students.*

Discussion

Under existing Title 5 progress standards, Policy Statement #3 would mean that a student who is unsuccessful in early basic skills courses could be dismissed prior to accumulating 30 (45) units, and would be dismissed if s/he has not met requisite skills standards after 30 (45) units. The unit limit is consistent with the recommendation of the Master Plan Commission and the draft of the Joint Legislative Committee report as well as with the existing policy of the federal government in counting non-degree applicable units toward financial aid eligibility. The policy also provides for referral of such students to noncredit instruction if that is deemed appropriate. It further requires that each college have a policy and procedure for dealing with those exceptional cases where a waiver from or appeal of the 30 (45) unit limitation is needed (e.g. when a student has made consistent and significant progress but has not quite attained eligibility for college courses). This last feature is also consistent with a recommendation of the Master Plan Commission.

Further, Policy Statement #3 includes an emphasis, in subsections (c) and in the Board Implementation Directive, on the need to uniformly enforce standards of student progress, probation, dismissal and return rights, including the proposed new unit limitation. This emphasis is included because several respondents in the consultation process indicated that lack of enforcement of existing standards gives them cause for concern about whether the mechanisms proposed here would be viable for limiting enrollments in basic skills. The alleged non-enforcement apparently stems, on the one hand, from an inability of some colleges' computerized information systems to track student progress in a timely manner and, on the other, from a lack of resources and procedures in the Chancellor's Office to monitor and enforce compliance by the districts. When the funds for matriculation are provided, the first problem should be corrected, and the Board's 1987 Budget request for staff to monitor compliance with minimum standards should provide the Chancellor with the capacity to assure compliance with the progress standards.

Finally, Policy Statement #3 merely states that student academic progress standards should be the same for students in basic skills courses as for all other students enrolled for credit. It does not address whether the existing progress standards are adequate for either group. The Master Plan Review Commission has recommended that the Board "strengthen current probation and dismissal standards." The Chancellor has also directed staff to review these standards, particularly the facts that:

1) the current standards for dismissal require that "a student who is on academic probation shall be subject to dismissal if the student earned a cumulative grade point average of less than 1.75 in all units attempted in each of 3 consecutive semesters (5 consecutive quarters)"; and

2) the current Title 5 standards do not address readmission after dismissal, even though Education Code, Section 71066, requires the Board to "establish minimum standards to govern student academic standards relating to...readmission policies."

Consequently, the implementation strategy proposed for Policy Statement #3 includes an intention to review and revise, as necessary, the existing relevant provisions in Title 5.

POLICY STATEMENT #4: *Assuring Proper Placement and Equity for Students by Defining the Required Scope of Assessment*

It is the policy of the Board of Governors that:

a) **College assessment programs, established in relation to implementing matriculation, shall be the basis for establishing skills requisites for entry level degree and certificate courses and basic skills instruction courses. Assessment programs shall be sufficiently comprehensive and valid to assure appropriate placement of students and also prohibit unlawful discrimination. Specifically, assessment programs shall include, at a minimum, measures of students' language skills and computational skills, assistance in identifying aptitudes, interests and educational goals, evaluation of learning and study skills, and referral to specialized support services. In addition, assessment programs shall provide for early identification of limited English speaking and disabled students for whom the regular assessment processes may be inappropriate or result in misleading conclusions and shall provide alternative or supplemental assessment processes suited to such students.**

BOARD IMPLEMENTATION DIRECTIVE:

(a) The Board directs the Chancellor to monitor the implementation of Policy Statement #4 by requiring that college matriculation plans include a comprehensive plan and procedures for assessment programs, including a description of the instruments and procedures to be used.

(b) In addition, the Board directs the Chancellor to undertake a thorough review and analysis of districts' existing assessment policies, practices and instruments in order to determine whether there is a need for or an advantage to establishing more consistent statewide policies and practices in these areas. The Chancellor should propose by July 1987 a plan and timeline for accomplishing this effort.

Discussion

There are three basic questions which institutions implementing major assessment policies must ask: 1) Why test? 2) How do we test? and 3) Whom do we test? The first question requires a clear identification of what is to be measured supported by data that confirm the importance of measuring those specified areas. The second question refers to the validity of the testing instruments selected inasmuch as these must be able to test specifically the areas designated for assessment. Lastly, the process must be cognizant of the population to be assessed and the appropriateness of the instruments selected to that population; that is, the reliability question -- do these tests accurately predict what we wish to predict for a given population?

Why is it important to establish assessment policies for the California Community Colleges?

The answer to this question must be consonant with Policy Statement #1. Specifically, if community colleges are to provide the full range of basic skills, it follows that appropriate placement into those courses, and subsequent curriculum decisions must be based on an understanding of student skills and needs derived from appropriate and valid assessment. The scope of assessment, therefore, must be determined by both the educational needs of the students in that college community and by the educational program which has been designed to address those needs, particularly as these refer to basic skills instruction. Assessment for community colleges must include English writing and reading skills, computational skills and critical thinking skills. It is also necessary to include assessment in the affective domain, including personal and career goals, as well as the assessment of study skills, and referral to financial aid and other support services. The importance of assessment in all of these areas has been argued in all of the documents pertaining to matriculation and will be effected in practice through the matriculation implementation plan.

How should we conduct this assessment?

In 1983 Dr. Jeanine Rounds of Yuba College completed the first comprehensive study of assessment practices in the California Community Colleges. The Learning Assessment Retention Consortium (LARC) followed up on that study for two subsequent years. In addition, Dr. Jon Kangas of the San Jose Community College District and the American Association of Community and Junior Colleges in collaboration with the ACT conducted separate surveys of testing statewide. All these studies concluded that while nearly all colleges do some type of assessment, there is diversity in practices and instruments used for assessment of students. There are over twenty-four standardized testing instruments used throughout the state. Of these, the two most commonly used batteries including reading, writing, and math are ASSET (ACT) and the Comparative Guidance Program or MAPS (College Board).

It is important to note that while the Board has indicated, in this policy and in the matriculation plan, what student characteristics must be assessed, the choice of assessment instruments, techniques and processes is, for now, delegated to the colleges, with approval by the Chancellor. The matriculation legislation (AB 3, Campbell, Hayden and Seymour, 1986) requires such approval by the Chancellor and also calls for reports of various studies over a three-year implementation/evaluation period. Policy Statement #4 would direct staff to include in such evaluations "a thorough review and analysis of districts' existing assessment policies, practices and instruments in order to determine whether there is a need or an advantage to establishing more uniform, statewide policies and practices in these areas."

What are the characteristics of the population to be assessed?

Since the 1980 census, there have been numerous studies and projections made on the significance of these data for the nation as a whole and for the state of California in particular. Demographers have provided evidence indicating that the percentage of the population which is made up of ethnic and language minorities will continue to increase so that by the year 2000 California will be a "majority-minority" state. It is estimated that by the year 2000, of the 31.8 million persons in this state 17.4 million will be White (non-Hispanic), 9 million will be Hispanic, 3.2 million will be Asian, and 2.3 million will be Black (Center for the Continuing Study of the California Economy, Palo Alto, 1982). Based on these figures, the increased percentage changes in the population between 1980 and the year 2000 are 11% for Whites, 97% for Hispanics, 102% for Asians, and 26% for Blacks. It is important to note, however, that the largest gains in absolute numbers will be for Hispanics, who will increase by 4.4 million, followed by Whites at 1.68 million, then Asians with 1.61 million, and finally Blacks at .5 million. Finally, given the age distribution for these various population groups, it is expected that by the year 2000 fifty-two percent (52%) of the school-age population will be composed of minorities. Since the greatest growth will be for Hispanics and Asians, it follows that there will also be a growth in the number of Limited-English-Proficient (LEP) students. This is particularly true for these two groups because the level of immigration, refugee resettlement and secondary wave immigration is expected to remain constant well into the year 2000 (Rand Corp., 1985).

With this understanding of the characteristics of large numbers of students who will be undergoing assessment, it becomes even more important and complex to ensure that educational equity is maintained by a selection of instruments, procedures or test batteries which most accurately provide a profile of student skills. California has a particular challenge and responsibility to account and adjust for the specific cultural and linguistic characteristics of its student population.

Assessment literature is filled with accounts relating to test bias. This problem has been further defined by noting that test items and test protocols may not accurately represent the skills or aptitudes of population groups outside the group selected for test norming, since usually Caucasians dominate. For example, research has shown that there are 56 distinctive idioms that are particular to Black writers as opposed to 13 for Whites (College Assessment Program Evaluation Institute, CUNY, 1985). For non-native English speakers, the differences are even greater, with a myriad of cultural and linguistic factors which ultimately influence writing. It becomes the responsibility of educators to recognize these differences within an informed context so that appropriate placement into an appropriate curriculum may be accomplished. In *The Mismeasure of Man*, Steven Gould writes, "The worst bias, however, is the bias against the kid who does not know the answer." The ultimate educational inequitable bias is for any segment of instruction to continue to have an educational process from which some students emerge with answers to most of the questions while, consistently, others emerge from that same system without the answers.

The fact that test construction is vulnerable to test bias has been addressed in both legal and educational arenas. In response to this discussion, alternatives have emerged to counteract bias and limit the negative side effects of testing. One is a set of recommendations to use multiple tests or test batteries to formulate a more accurate profile of student abilities and deficiencies (Mercer, 1976; Owen, 1983). It is the opinion of experts that the use of a single score as an abstract indicator of competency is not only controversial but also highly questionable when judged against criteria for the tests' own claims of validity and reliability. In states where mandatory assessment has been implemented, specific conditions and policies have also been designed to mitigate negative side effects related to testing. These include:

1) Waivers Where Appropriate. For example, should a limited English proficient person be submitted to a full battery of assessment or should s/he be assessed initially with tests designed to measure English proficiency?

2) Periodic Assessment. Students should be assessed periodically to allow for "value added" gains to be demonstrated, thereby enabling counselors and faculty to make corrections on an individualized basis. This would be most important in the case of ESL students, because research shows that skill level gains are particularly rapid for this group.

3) Test Challenge Procedures. There needs to be included in the test protocols a process to enable students to challenge results, allowing for re-test and for the discussion of test results.

4) Assessment Support Services. Colleges must have in place appropriate placement practices, basic skills, instructional programs and the necessary guidance and student follow-up mechanisms to complement assessment activities.

To summarize, if assessment is to be a tool for access and success, and one which promotes both equity and excellence, then it must be a process which is based on specific educational philosophy, is conscious of the diversity of the student population, and integrates supportive placement, curricular and personal support services into the entire process.

Proposed Implementation Strategies and Timelines

It should be clear from the foregoing that the proposed policy statements are complex and far-reaching, that they are inextricably linked to the implementation of matriculation and that they, like matriculation itself, will require a significant period of phase-in during which varying college practices can be evaluated and refined. Indeed, the policy statements acknowledge that, as a result of the learnings that occur during the evaluation period, the Board's own policies may themselves need to be revised at a later date. The Board Directives for implementing each policy statement take these conditions into account.

1. Policy Statements #2, concerning the establishing of skills requisites for degree and certificate courses, and #4, concerning the scope of required assessment, should be implemented as guidelines in conjunction with the implementation of matriculation. Specifically, provision for their implementation has been amended into the Board's matriculation implementation plan with the understanding that: a) the varying practices of the colleges be subject to the same approval process as is required for other components of matriculation, and b) that their efficacy be subject to the three-year evaluation required for matriculation. The final report on the matriculation evaluation should contain recommendations for ongoing Board policies on each subject.

2. Policy Statement #3, concerning student progress standards, is the one proposed policy statement that need not be subject to a long-term phase-in period. Rather, the Board Directive on page 12 specifies the tasks that should be carried out by staff and indicates that proposals for Board action be prepared by July 1987 for implementation in the colleges not later than July 1, 1988.

   Subsection (c) of Policy Statement #3, and the related Board Directive concerning the respective responsibilities of the colleges and the Chancellor's Office for enforcing student progress standards, should be implemented during academic year 1987-88 by means of new administrative procedural guidelines. Specifically, staff, with the assistance of new compliance positions requested in the Board's 1987-88 Budget proposal, should, by January 1988, announce a "thorough and systematic compliance review process" to be initiated in fall term 1988. Colleges, in turn, will upgrade their monitoring of student progress and be prepared to submit to the compliance review beginning in fall 1988.

3. Policy Statement #1, concerning the definitions and scope of pre-collegiate basic skills instruction and adult basic education, will also be implemented in conjunction with matriculation and subject to the evaluation of matriculation. However, unlike the implementation of Policy Statements #2 and #4, this policy statement cannot be fully implemented in the first year of matriculation; rather, because of the several major policy issues raised, the Chancellor will appoint a select task force on Pre-collegiate Basic Skills Instruction and Adult Basic Education to deliberate and propose during 1987 a strategy and timeline for implementing Policy Statement #1 beginning July 1, 1988.

CIVIL RIGHTS VS. ACADEMIC REFORM

A Reconciliation

(Prepared by Catherine Close
for a Chancellor's Office Staff Workshop
January 1987)

CIVIL RIGHTS AND ACADEMIC RIGOR: A RECONCILIATION

Guidelines for Eliminating Discrimination in Vocational Education	Title 5, Section 55002 (New)		Board of Governors Policy for Strengthening Academic Standards	Extended Opportunity Programs and Services	Disabled Students Programs and Services
	(a) AA degree credit	Nondegree credit			
Prohibit admissions criteria that have a "disproportional impact" on persons of a particular race, color, national origin, sex or handicap unless the criteria has been validated as essential to participation in a given program and no alternative equally valid criteria is available. Prohibits restricting an applicant's admission because the applicant is of limited English speaking ability and cannot participate and benefit to the same extent as students whose primary language is English. Requires identification and assessment of LES students. Requires colleges to open all vocational education programs to LES students. Prohibits denying a handicapped student admission because of architectural or equipment barriers or because of the need for related aids and services. Academic requirements must be adjusted to the needs of particular handicapped students where possible.	(8) Requires, when deemed appropriate, entrance skills and consequent prerequisites. (9) Requires, when deemed necessary, eligibility for English and/or mathematics at the associate degree level. (10) Requires the ability to think critically and apply concepts at the college level. (11) Requires learning skills and vocabulary appropriate for a college course. (12) Requires college level educational material.	(7) Requires, when deemed appropriate, the completion of prerequisites.	I. Requires colleges to offer the full range of basic skills necessary to correct skills deficiencies. Limits a student to 30 semester or 45 quarter units of precollegiate basic skills. Excludes ESL from basic skills and from the 30/45 unit limit. Basic skills must be evaluated against student outcomes. II. Requires minimum skills and prerequisites for entry into all degree level and certificate applicable courses and at each level of the basic skills curriculum. Prerequisites must be systematically derived. Access may not be denied based on a single test score. Courses may be exempt from having reading, writing, computational, or critical thinking prerequisites if those are not necessary for success in the course. IV. Assessment programs shall be the basis for establishing prerequisites. Assessment programs shall be sufficiently comprehensive and valid to assure appropriate placement. Assessment programs shall prohibit discrimination. Assessment programs shall provide for early identification of LES and disabled students and shall provide alternative assessment.	Requires assessment of EOPS eligible student. Requires basic skills instruction for students who need it to reach their educational goal.	An IEP must be developed for each disabled student, specifying courses and services needed to meet the student's specific need.

QUESTIONS AND ANSWERS

As explained in the Statement of Intent (see pp. 1 1 through 1 12), the materials in this handbook, including the answers below, "represent the clearest understanding regarding the intent of the regulations [55002 and 55805.5] to date. Should there be any further clarification of the regulations themselves . . . the clarification would be consistent with [these] explanations. (Subsequent to this initial effort to strengthen standards, of course, there might arise a need to rethink some of the issues. Should new policies or guidelines thus come about, they would not be enforced retroactively.)"

Questions:

1. Relation of "Philosophy" (55805.5) to "Rigor" (55002)
2. Composition of the Curriculum Committee
3. Course Outlines
4. Reporting of Course Classifications
5. Transcripts and GPA
6. Essay Tests
7. "Critical Thinking"
8. "Critical Thinking" and Vocational Education, etc.
9. "College Level"
10. Language and Computational Skills in Studio Courses
11. Co-Requisites and Pre-Requisites
12. Establishing Requisites
13. Requisites and Civil Rights
14. Validation of Requisites: Non-Vocational Courses
15. Validation of Requisites: Vocational Courses
16. Unnecessary Requisite vs. Low Standards
17. Pre-College Level Occupational Training
18. Pre-Requisites and the "Sole Criterion" Prohibition
19. "College Level" Requirements and Civil Rights
20. Non-degree Certificates vs. Associate Degree Courses
21. Repeatability of Courses for the Disabled
22. Non-Degree Credit vs. Noncredit

1.	Q	How are Sections 55805.5 and 55002a of the proposed revision to Title 5 of the California Administrative Code related?
	A	A course must meet the requirements of both sections. That is, a course listed in 55805.5 can only be offered if conducted with the level of rigor specified in 55002a and, ordinarily, only courses that fall into one of the categories in 55805.5 count for college credit.

An English course more than one level below English 1A, for example, would not qualify for degree-applicable credit status, even if taught at the level of rigor specified in 55002a. On the other hand, even if a course is of the type covered under 55805.5, it must also meet the 13 criteria listed in 55002a (except where criteria in 55002a 8-9 are "deemed inappropriate" by the curriculum committee). College transfer courses, for example, are not automatically considered degree-applicable credit courses. They are still subject to a local approval process sufficient to determine that each of the 13 criteria have been met.

Some courses, such as some "stand-alone," experimental, or higher order skills courses, that do meet the rigor requirements of 55002a, may be offered for college credit, even though they do not fall under 55805.5. Such courses are appropriate for college credit if their treatment of the subject is not restricted to immediate applications, but introduces students to the key concepts and methods of a discipline.

When such courses are under review, the curriculum committee will look closely for (a) comprehensiveness of content, (b) treatment of principles, (c) diversity of application; (d) introduction of alternative viewpoints and/or (e) critical assessment of conclusions.

For example, a course in "critical thinking," taught in order to improve student performance in other courses, could be taught with a comprehensiveness and rigor fully comparable to that of a philosophy course in informal logic -- or it could be taught strictly as a "study skills" course. In the first case, the course would be degree applicable while in the second, more restricted course, the course would be for nondegree credit. (Either approach could appropriately begin with immediate application of selected logical skills to the resolution of problems students were having in other courses. However, in the course intended for degree-applicable credit, the course would move beyond immediate applications to the presentation of general concepts and principles.) Evaluation of student performance in turn would be not only of the students' ability to apply these principles to immediate problems; but of the students' comprehension of the principles themselves as they might be applied to a diversity of issues.

2. **Q** What is the "curriculum committee" (55002a1, 10-12; b1), and how is it to be selected?

A The curriculum committee should constitute the highest level decision making body that yields recommendations through administrative procedures to the district board regarding courses. It must include faculty and the district board must approve the makeup of this committee. Beyond that, district board regulations regarding its composition must be determined by the mutual agreement of the academic senate and college administration.

3. **Q** Under 55002a(3), what must the outlines include? Must they be submitted to the Chancellor's Office, or will it be enough to have such outlines available on campus?

A Outlines need not specify in detail each and every assignment, test, etc., since it is appropriate that the specific syllabi to be based upon these outlines differ from section to section and semester to semester. What the "outline of record" submitted to the local curriculum committee for course approval must show are the course objectives, the skills to be imparted, subject matters to be covered, the level of difficulty involved, the kinds and frequency of assignments and assessments to be made, and the amount of work to be required for each unit of credit.

In short, the outline should at once (a) provide the curriculum committee enough information to make a correct judgment regarding which credit category the course belongs in, and (b) make clear to each instructor precisely what he or she is to be held accountable for in teaching the course. Beyond these minimum requirements, which are sufficient to assure that a course does in fact meet the requirements of the Title 5 credit status it has been assigned, teachers can and should exercise all of the curricular and pedagogical ingenuity for which they were hired, exceeding the required minimum wherever they judge it appropriate without, however, exceeding expectations for lower division college work.

Outlines will not ordinarily be submitted to the Chancellor's Office but will be kept on file locally. (See "Documentation" under "Statement of Intent.")

4. **Q** (a) How are the classifications of courses approved by the curriculum committees under 55002 and 55805.5 to be reported to the Chancellor's

Office? (b) Must courses modified to fit the requirements of 55002 be resubmitted for approval to the Chancellor's Office?

A (a) Course classifications approved under 55002 and 55705.5 will be reported through the usual course classification system in the Course Activities Measure Report [CAM]. (Changes in definitions of these categories to more accurately reflect 55002 and 55805.5 will be provided by the Chancellor's Office as soon as possible.)

(b) Courses that are modified and then approved in accordance with Classification Procedures certified by the Chancellor's Office are considered to have approval (although subject to audit). Such courses do not need to be resubmitted to the Chancellor's Office.

(c) Any courses whose funding levels shift as a result of the new Title 5 requirements should be reported to the Chancellor's Office. (See "Documentation" under Statement of Intent.)

5. Q How are degree- and nondegree-applicable courses to be recorded in transcripts? Computed in the GPA?

A Transcripts should indicate which courses are degree applicable. Grade point average must be based upon all credit courses, both degree-applicable and nondegree-applicable. (Colleges may show a separate GPA based only on degree applicable courses if they so choose, but only the GPA based upon all credit courses can be used to determine academic progress, probation, financial aid, etc. See Section 55757 of Title 5.)

6. Q Does **55002a(5)** mean that all courses must base course grades at least in part upon:
essays
problem-solving exercises
skill demonstrations
(does "or" = "and/or"?)

A Yes -- an instructor can use one or more of these, or combine these with other types of evaluation. Essays must always be at least part of the basis of evaluation *unless* problem-solving or skill demonstration are clearly more appropriate. Essays, however, are not limited to essay examinations but include *any written assignment(s) of sufficient length and complexity to require students to independently select and order their ideas as well as to express them clearly.*

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7. **Q** In **55002a(10)**, what is meant by ability to *"think critically"* and *"to understand and apply concepts at levels determined by the curriculum committee to be college level"*? (See also question #9)

A The exact definition of these terms will be up to the local curriculum committee, as will the process of applying this definition to the approval of specific courses, so long as decisions based upon these criteria do not admit courses that would be widely regarded as not "college level." In certifying the approval process for a college the Chancellor's Office will be looking for the specification of operational criteria somewhere in that process. Even where the curriculum committee delegates the responsibility for determining what constitutes "critical thinking" to the departments, they should still require that such determinations be demonstrably made on the basis of these operational criteria. (E.g. upon explicit references to some specific reasoning skills in both the course objectives and evaluation procedures which are supported by the course content and materials.)

It is also assumed that while the working definitions of these committees will vary greatly from district to district, reflecting differing priorities, terminologies, and cognitive theories, (e.g. Aristotle, Piaget, Bloom, etc.) they will all nonetheless be recognizable as "critical thinking." They might, for example, call for the kind of analysis and composition skills taught in an English 1A course, or they might call for the exercise of good judgment or the solving of non-routine problems associated with an occupation.

Ability to think critically would thus typically include the ability to do such things as:

- analyze
- explain
- deduce conclusions
- identify, anticipate or pose problems
- synthesize
- evaluate
- diagnose
- compare and contrast
- justify
- apply principles
- solve unfamiliar problems.

"Ability to understand and apply concepts at . . . college level" is the ability to carry out any of the above processes upon assignments difficult enought to meet 55002a (11 and 12).

8. **Q** How does "critical thinking" fit into courses that teach "hands on" skills, such as physical education, some vocational education courses, and the arts?

A In general, it relates to "thinking ahead," to correctly evaluating products or situations, and to recognizing the need for certain actions, and being able to take such actions on one's own, without requiring specific directions.

e.g. In typing: recognizing when what is to be typed makes no sense and taking the initiative to inquire regarding the writer's intentions; in tennis: understanding the strategies appropriate to different situations; in the arts: being able to critically assess a finished work, perhaps comparing and contrasting it to other works; in auto repair: successfully diagnosing and solving an unfamiliar problem.

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9. **Q** In 55002a (11 and 12), what is meant by "college level":
"learning skills"
"vocabulary"
"educational materials"?

A As with critical thinking (see Questions #5), developing and applying an operational definition of these terms will be up to the local curriculum committee.

"College level" might be operationalized by the curriculum committee's establishing a procedure for analyzing required texts or samples of reading. They could also include a policy regarding the waiver of such analysis for primary sources or established classics in given fields, including standard textbooks. Such procedures and rules could, among other examples, reference readability formulae or standard college bookstore lists, or texts used in an accredited four-year college.

On the other hand, the matter of determining "college level" remains irreducibly a matter of judgment, of weighing principles rather than applying rules. Determining whether or not materials are "college level," is a complex matter, often not reducible to even the best readability formula. Certainly most of the material should be certifiable as at least 10th grade, but some well-written works of merit have lower readability measures, while other texts may have a high readability measure only because they are poorly written. Of probably more importance than readability *per se* is the complexity and breadth of the ideas and the care with which they are presented. The value of the content and the quality of the presentation should always be given greater weight than readability alone.

This operational definition should, of course, yield decisions regarding "college level" that are within what the wider community commonly accepts as college level work, but it may take whatever form meets the need of the individual college or district. Where the curriculum committee delegates the responsibility for determining what constitutes "college level" to the divisions or departments, they should still require that such determinations be demonstrably made on the basis of these operational criteria.

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10. **Q** Are college level language and computational skills always necessary? What about, for example, a studio course in music or art or in a hands-on occupational course -- courses sometimes collectively referred to as "not 'reading' dependent (or not "computation" dependent)?

A College level language and computation skills are not essential to all courses. (Critical thinking skills, on the other hand, and college level study skills, etc. (i.e., those in 55002a, 10-12) are required of all college level courses and cannot be set aside by the curriculum committee. The right to deem certain of the college level skills as "inappropriate" is reserved to the committee with respect only to the skills mentioned in 55002a (8 and 9). Where a department recommends to the curriculum committee that such skills are not necessary in a given course, the burden of proof is on that department to show the inappropriateness of the requirements [e.g., by reference to widespread practices of other colleges, especially of four-year colleges -- or to a properly conducted job anaysis of the occupation in question]. Whatever skills were called for in the course, on the other hand, they need to be exercised at a level of competence and complexity sufficient to merit their being considered as "postsecondary" by those knowledgeable in this area [e.g., by the occupational advisory committee].)

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11. **Q** In 55002a (9), are "co-requisites" as permissible as "pre-requisites"? Is there really a difference? What is the relationship of these subsections to the Board Policy, *Proposal for Further Strengthening Academic Standards*, January 1987, which requires "requisites" for all entry-level degree courses and all levels of basic skills instruction?

Note: *Requisites are to be phased in over a three-year period. The answers in the sections that follow should be taken as the best answers to date -- ith more precise and better founded guidelines to develop as the process unfolds. Meanwhile, colleges are strongly advised to shun across-the-board pre-requisites and to treat unvalidated pre-requisites as recommendations only.*

A Yes, a "prerequisite" is a skill or body of knowledge necessary to successfully *participate* in a given course; that is, without such preparation the student would be lost almost from the first day of the course. A "co-requisite," on the other hand, is a skill or supplementary body of knowledge that is necessary to successfully *complete* a given course. It may be taught concurrently with the course in question, assuring that the necessary skill or supplementary knowledge is available to the student by the end of the course for which there is a co-requisite. A co-requisite might be a skill that can only be well learned in conjunction with a subject-matter course; for example, a skills co-requisite course that taught how to write research papers might best be taught in conjunction with a subject-matter course in the social sciences that required the completion of a term paper.

In courses that are dependent upon "language skills," 55002a(9) requires eligibility for enrollment in associate degree credit courses in English as a pre- or co-requisite. Similarly, in courses dependent upon computational skills, eligibility for college-level mathematics (see 55805d) is required. The local board is to determine when such dependency exists on the basis of empirical evidence. (See Questions #14-19.)

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12. **Q** Board of Governors *Proposal for Further Strengthening Academic Standards, Policy #2*, January 1987 (see attached) requires the establishment of skill requisites (see Question #11) for all entry level degree and certificate courses and for each level of a Basic Skills Curriculum. How are these established?

A College level requisites are to be established through the college-wide curriculum committee, but these requisites must be validated as bearing some demonstrable relationship to the work required in the course.

The Board policy allows for at least a three-year phase-in of this policy during which the necessary data may be collected. During this interim, colleges are strongly advised to make very clear to students that the unvalidated pre-requisites are only recommended.

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13. **Q** Is there an inherent conflict between the requirements of the new Title 5 regulations for establishing pre-requisites and the federal requirements for non-discriminatory admission of students, as these have been interpreted by the Office of Civil Rights? Could a college find that in its efforts to comply with one set of requirements it had necessarily violated the other?

A No, there is no fundamental conflict here because the new regulations permit curriculum committees to deem certain requirements inappropriate, and the new Board policy takes into account existing case law on the subject. Nonetheless, the establishment of pre-requisites can lead to direct contradictions if they are not developed with civil rights considerations firmly in mind.

Pre-requisites: The Board of Governors policy (January 1987) requires the establishment of valid pre-requisites to be developed and tested over a phase-in period. Until pre-requisites are validated, they should be recommended only. Any existing pre-requisites are assumed to be validated. Should they be challenged as discriminatory, a college would be called upon to show that they were valid.

To assure compliance with civil rights laws when making determinations regarding pre-requisites, the curriculum committee *must* consider the following:

(a) **Will the pre-requisites disproportionately exclude members of protected groups?** (A rule of thumb used in the Uniform Federal Guidelines on EEOC for determining employment discrimination is that a selection practice is vulnerable when the rate of underrepresented groups selected is less than four-fifths of the rate for fully represented groups.) For example, an ethnic group whose members are at this time mostly of limited English proficiency, for example, would be disproportionately excluded by the requirement to read and write English as the competence required for entry into English 1A.

(b) **If so, is the pre-requisite valid?** (See below) If not, the curriculum committee must "deem" that pre-requisite unnecessary.

(c) **If the pre-requisite is valid, has a "bridge" into the class been provided?** If a pre-requisite has a disproportionate and hence discriminatory impact, then the college is obligated, under both the civil rights laws and recent Board of Governors policy, to provide and publicize a way whereby a student not initially eligible for enrollment in a course can be enabled to meet the pre-requisites.

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14. **Q** How is validation of requisites in non-vocational courses to be accomplished?

A Ordinarily, requisites for a non-vocational course are validated by showing that students who do not have these requisites are significantly more likely to receive unacceptable grades in the course. Validation should be based upon data from a number of sections. (Colleges teaching comparable courses from approved outlines with similar objectives, content and evaluation methods may combine data or reference each others findings for validation.) Specific suggestions regarding how this can be done will be developed during 1987-88.

When data show that students without requisites do tend to fail a non-vocational course, the curriculum committee should satisfy itself that the stated course objectives of entry-level courses do in fact fall within what would generally be regarded as "lower division college work" and are at entry level -- before establishing a requisite. (Where these objectives clearly necessitate the course work and the consequent levels of competence, they support the validity of pre-requisites posed in terms of these competencies.)

Sequenced courses above entry-level may set as a pre-requisite completion of courses earlier in the sequence, without having to validate separately these courses as pre-requisite on the basis of empirical studies. (E.g. French 2 requiring French 1, and calculus requiring algebra and geometry.) Conversely, course objectives of courses earlier in a sequence can be justified as necessary by referring to the requirements of the subsequent coursework these earlier courses are supposed to support.

55002(a)(9) requires that in degree-credit courses whose stated objectives can only be met by extensive reading and writing, the level of language skills employed must be one level below English 1A or higher. Thus students coming into such classes must either have such skills or be concurrently enrolled in an appropriate skills course. Similarly, a course involving abstract mathematical explanations and assignments using formulae, graphs, etc., must be difficult enough to require ability at the level of algebra, or completion of an algebra co-requisite, if it is to count toward a college degree.

The force of this requirement is that for language- or mathematics-dependent classes, college level is defined as requiring such skill levels. The requirement itself, therefore, cannot be waived for the course as a whole even though it can be for individual students; that is, the curriculum committee can determine that a course is not reading-dependent, but it cannot determine that in a course that is reading dependent the language skills can be lower than those here specified.

If empirical evidence shows that students without the requisite language or computational skills can typically pass the class, that does not mean that these requisites are not essential, but that the course itself may not be rigorous enough. (It could, of course, also mean that the course was exceptionally well taught.) Degree-credit courses, in which communication or computation are critical, must be demanding enough that students lacking the skill level specified in 55002a(9) would typically be unable to succeed. (On the other hand, the curriculum committee cannot arbitrarily determine that a given course ought to have reading as central simply to justify an across-the-board requirement. Studio art and P.E. courses -- performance courses -- are traditionally taught, even at universities, with little or no reading or writing. While such courses certainly could involve reading and writing, insisting upon objectives and hence requisites that excluded underrepresented groups from such classes on the basis of reading or writing skills would be of questionable validity.)

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15. **Q** How is validation of requisites in vocational courses to be accomplished?

A If a given requisite tends to exclude students from underrepresented groups from occupational courses at a rate greater than the exclusion rate of fully represented students, the requisite must be validated in three steps: (1) The requisite must be shown to be necessary to succeed in the course (see a in Question #13). (2) Research shows the requisite to be valid relative to the course objectives. (3) The objectives themselves must be validated against the occupation in question. This validation may be accomplished by reference to a survey of employers or by reference to a properly conducted job analysis; or it may reference properly conducted studies of the occupation done nationally, statewide, or at other community colleges; or cited in the literature insofar as these can be shown to fit the local situation.

In other words, the knowledge or skills that constitute the objectives of a course, if they constitute barriers to underrepresented groups, must be shown to be either required or desired by the occupation in question. An objective of an occupational course is valid when students lacking that skill or knowledge would be regarded as "not employable," or as "underprepared," or as "no better prepared than someone without training." It is also valid if employers would regard a college that hasn't provided such skills or knowledge as "not having done its job" -- or else would regard a college that had provided them as doing an exceptionally good job and would preferentially hire students with such skills.

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16. **Q** Is it always the case that when empirical research shows that the pre-requisites are apparently not necessary, inasmuch as students who lack them do not typically fail the course, then these requisites are in fact invalid and must be eliminated from the course?

A Ordinarily, such a finding of "no failure" would invalidate the requisite, where the requisite itself would tend to disproportionately exclude underrepresented groups. However, the finding that no requisite skills are necessary could also result from the course being taught at too low a level. In such a case, one of the other two validation methods could be appealed to. That is, if the course is easily passed because the objectives of the course are incomplete, or because the evaluation of the accomplishment of these objectives is too weak, then the course should be strengthened and the requisites justified in one of the following ways:

(a) Non-occupational: Comparison of course objectives, content, materials, and evaluation standards to courses with similar titles taught at other four-year and other two -year colleges; comparison of required exit skills in introductory courses, or courses earlier in a sequence, with the "entrance skills" pre-supposed in subsequent courses.

(b) Occupational: Comparison of course objectives, content, materials and evaluation methods to past, current and emergent practices in the occupation, to the requirements defined by the advisory council, or to feedback from employers of graduates.

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17. **Q** If college-level requisites cannot be validated for a given occupation, is the college obligated to provide training for that occupation in courses that are not degree applicable?

A No. A college certainly may do so, but a college has no legal or regulatory obligation to provide for occupational education, as such, at less than college level. The college is, however, obligated to provide whatever non-degree credit courses are necessary to provide students with the skills and knowledge necessary to participate successfully in the occupational programs they wish to enter. See Board of Governors Policy #1, *Policy Proposals for Further Strengthening Academic Standards*, January 1987.)

Note: This answer represents a change of position on this point from that taken in earlier drafts and stated in previous telephone conversations.

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18. **Q** Even where a pre-requisite is valid, couldn't it still be considered a "sole criterion" for admission of the sort outlawed by civil rights laws?

A Even where the pre-requisite skills or knowledge have been validated as appropriate for a given course, the test used to determine whether someone has the necessary skill or knowledge must itself be validated and non-biased. It must, moreover, be supplemented by other measures capable of overriding test scores where indicated. These measures can include recommendations by previous instructors or employers and/or interviews with the student in question.

Colleges should provide an appeal procedure that settles cases of reasonable doubt in favor of admission, should the student so choose.

Even in the case of a sequenced series of courses, since it is at least possible for a particular student to have acquired the knowledge necessary for entry elsewhere, it must be possible for students to appeal a pre-requisite and demonstrate adequate mastery on a case-by-case basis. Where reasonable doubt exists, again, the requirement should be waived in those cases where a student counseled on the probabilities of success chooses to gamble and insists on taking the course anyhow.

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19. **Q** Apart from pre-requisites, isn't there still an inherent contradiction between the civil rights requirements that student not be arbitrarily excluded from vocational courses and the new Title 5 requirements that any course to be offered for degree credit -- whether vocational or not -- must rely upon "college level" assignments, vocabulary, and critical thinking?

A There may a problem here. For even though the specific definition of these criteria is left to the curriculum committee, these requirements cannot be eliminated altogether by that committee. And by any ordinary interpretation of any one of those terms. it would seem probable that at least some protected groups would thus be disproportionately barred from participation in degree credit courses, including vocational.

On the other hand, as a matter of simple logic, one can hardly object to the insistence that for a course to count toward a lower division college degree, it must require lower division college level work.

The way out of this dilemma is to permit any vocational course in which there is no valid occupational requirement for college level abilities to offer a version where no "college level" pre-requisites are set. Completion of these courses would count only toward a certificate, not toward a degree. (Students who later changed their minds regarding career plans and wished to obtain an associate degree could not count such courses toward the degree, however.)

Note: This is a change in position from previous drafts where college were not only permitted to offer such courses but were required to do so.

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20. **Q** How can the same vocational course count towards both a non-degree certificate and an associate degree?

A It can't, if it doesn't meet the requirements of a degree credit course. There may, however, be two versions of a course, with different course numbers:

(1) A "Non-Degree Credit" version, designed for students who have no occupational need to meet the "college level" skills requirements ; and

(2) A "Degree Credit" version, incorporating requirements for college level work in occupationally relevant ways for those who want to apply this course work toward an associate degree.

These courses would ordinarily be taught in separate sections, but where enrollment or available faculty cannot support at least one section for each version, the courses could be taught jointly in one class, with different requirements for successful completion of the course.

Since there are many occupations that do not require college level skills but that do benefit from them, students in many occupations will find themselves more likely to be hired, and certainly more likely to be promoted, if they possess such skills. It is thus certainly in the interests of vocational students that colleges offer degree credit courses in any vocational field for which it is possible to design appropriate courses. And it is valid to set appropriate pre-requisites for these, just as long as there are "bridges" into these courses.

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21. **Q** How often can courses for the disabled be repeated (55002a 13 and b8)?

A Other new Title 5 regulations for disabled student programs and services are proposed to permit disabled students to repeat courses for credit in both degree and non-degree applicable special classes (Section 56044) in accordance with district policies adopted pursuant to that proposed regulation. Further, the Chancellor's legal counsel has advised that any class may be repeated by a disabled student if necessary to provide that student "reasonable accommodation" under §504 of the Rehabilitation Act of 1973. (Special classes for the disabled, of course, remain subject to all the provisions of 55002 and 55805.5.)

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22. **Q** What is the difference between "Non-Degree Applicable Credit" and "Noncredit"?

A In general, "Non-Degree Credit" courses are of two kinds:

(a) Vocational courses that train students for occupations in which the possession of "college level" skills may be desirable for advancement but are not, strictly speaking, necessary for entry into the occupation. (See question #12.)

(b) Academic Development and Basic Skills Development courses which prepare students to succeed in the types of courses listed under 55805.5, or courses in a sequenced series whose final objective is the acquisition of such skills, are categorized as Non-Degree Applicable Credit courses so long as all of the criteria specified in 55002b are met.

Noncredit courses must fall under one of the nine areas covered by the Education Code, Section 84711a (1-9) (see Attachment) and meet criteria specified in Title 5, Section 55002c. These courses may or may not be designed to prepare students to succeed in degree-applicable courses.

MODEL PROCEDURES
for
Classifying Courses for Credit

under
Title 5, Sections 55002 and 55805.5

Contains Models:

Outline:	Request for Approval of a Course
Form:	Request for Exception
Checklist:	Recommending Classification of a Course (*for use by the Department*)
Checklist:	Classification (*for use by the Curriculum Committee)*

These materials are not required for use but are included only for information (see Statement of Intent).

MODEL FOR USE BY DISTRICT CURRICULUM COMMITTEE

REQUEST FOR APPROVAL OF A COURSE

Course Name ______________________

____

Program ______________________

____

To be completed by Dean of Instruction
Static Identifier ______________________
TOP # ______________________
Transfer Status 0 1 2 3 (circle one)
Course Classification A B C D E F G H I

Approved Credit Classification
☐ **Degree Applicable** ☐ **Noncredit**
☐ **Non-Degree Applicable** ☐ **Not Approved**

Catalog Description

Entry Level Skills, Pre-Requisites and/or Co-Requisites

Courses applicable to the degree must be of sufficient difficulty that if students are to succeed in the course they must enter it with certain competencies, or else be concurrently enrolled in courses designed to develop those competencies. Such requisites may either be recommended or validated as requirements. (Validation requirements are explained in Question and Answer Section, Questions #12-17, of the Academic Standards Handbook.) To assure open access, a way must always be provided and publicized whereby students not initially eligible for enrollment in any course because of the pre-requisites can gain the necessary competencies.

Requested Credit Classification (Applicant)
☐ Degree Applicable ☐ Noncredit
☐ Non-Degree Applicable ☐ Revised

Recommended Credit Classification (1st Review)
☐ Degree Applicable ☐ Noncredit
☐ Non-Degree Applicable ☐ Revised

☐ Will be taught by a credentialed instructor?

Repeatable only as permitted by law Yes ☐ No ☐

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Shaded boxes checked qualify course for degree credit

COURSE OUTLINE

This outline should contain sufficient information to:

(a) Permit the curriculum committee to correctly determine whether the course should be classified as noncredit, non-degree credit, or degree credit under Title 5, Sections 55002 and 55805.5

(b) Clarify the minimal obligations of the instructors of the course. (All instructors should be familiar with this outline and should use it in planning their courses, though their own syllabi may add objectives, goals, content, assignments and/or materials, may describe topics and objectives somewhat differently, and may place them in a different sequence.)

Objectives:

Limit these to the maximum number of critical objectives that can be effectively monitored and assessed. Formulate at least some of them in terms of student accomplishments concrete and specific enough that it can be determined to what extent they have in fact been achieved. For degree-applicable courses, include objectives in the area of "critical thinking" by requiring such outcomes as the ability to independently analyze, synthesize, explain, assess, anticipate and/or define problems, formulate and assess solutions, apply principles to new situations. etc.

Texts, Other Readings and Materials

(List typical or required primary sources, texts, and other materials; or reference college bookstore computerized listings, etc.)

Determining whether or not materials are "college level" is a subtle matter, often not reducible to even the best readability formula. Certainly most of the material should be certifiable as at least 10th grade, but some well written works of merit may have a lower readability measure while other texts may have a high readability measure only because they are poorly written. Of probably more importance than readability per se is the complexity and breadth of the ideas presented. The value of the content and the quality of the presentation should always been given greater weight than readability alone.

☐ Primarily College Level

☐ Primarily not College Level ______________________ (How Determined)

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Assignments: _____ hours per week (or equivalent)
List types

☐ Class participation and assignments require and develop *critical thinking* (see Objectives)
Describe how:

☐ Primarily College Level
☐ 2 hours of independent work done out of class per each hour of lecture or class work, or 3 hours lab, practicum, or the equivalent, per unit.

☐ Not Primarily College Level
☐ Ratio of amount of work per unit of credit required by curriculum committee for a nondegree credit course is met.

Assessment:
Grades will be based upon:

☐ **ESSAY*** (includes not only "blue book" exams but any written assignment of sufficient length and complexity to require students to select and organize ideas as well as to explain them. Some items should demonstrate critical thinking.)

☐ **COMPUTATION**

☐ **NON-COMPUTATIONAL PROBLEM-SOLVING** (Critical thinking should be demonstrated by the solution of unfamiliar problems that admits various solutions or various strategies for achieving the solution)

☐ **SKILL DEMONSTRATION**

☐ **MULTIPLE CHOICE**

☐ **OTHER: Describe**

For degree credit: (a) at least one shaded box must be checked and (b) if "essay" is not checked, it must be explained why essays are an inappropriate basis for at least part of the grade in the course.

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Course Content

College level courses should stress general principles of wide applicability. Where such principles are presented initially in terms of specific applications, they should be generalized and students asked to apply them to novel situations.

List Topics

This application is recommended for use in the local approval of courses. It has been designed by the State Chancellor's Office to incorporate new provisions in Title 5, adopted by the Board of Governors and written into law in 1986-87. These new regulations have resulted from the sustained cooperation and the vision of faculty and curriculum officers throughout the state. In carefuly defining the characteristics of a college-level course, they provide the opportunity for colleges to rethink the significance of their degrees and assure high credibility to the Associate degree earned anywhere in California.

55002-M-3/87-p.4

REQUEST FOR EXCEPTION

Section 55002a(8) authorizes the curriculum committee to determine the appropriateness of entrance skills and requisites for any given course. 55002a(9) also authorizes it to deem whether or not language and/or computational skills at the associate degree are essential to success in a given course. Finally, 55002a(10) and (11) authorize this committee to determine what is "college level" in learning skills, vocabulary, and in the ability to think critically and apply concepts.

These responsibilities will ordinarily be accomplished by the publication of guidelines, forms, instructions, and training materials. But the curriculum committee may also make some determinations on a case-by-case basis where cases are not covered by the guidelines or where the individual merits of a case justify departure from them. (It is advisable that disposition of such cases be made by a committee rather than one individual and that the rationale be made public, thus creating clear precedents for the handling of subsequent exceptions of a similar nature.)

Course Name	TOP Code
Program	Date

NATURE OF THE EXCEPTION REQUESTED AND RATIONALE

Requested by

Date

REQUEST FOR ADDITIONAL INFORMATION

☐ **EXCEPTION PERMITTED**

☐ **EXCEPTION DENIED**

Reasons

Signature	**Title**	**Date**

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MODEL Checklist for Recommending Classification of a Course For the Use of Department or Other Initial Screening Committee

For a course to qualify for credit, all single boxes must be checked. For it to qualify for degree credit, all the shaded boxes must be checked. (Shaded boxes = "yes"; white = "no"). Italicized comments are interpretations of regulations.

CRITERIA		DOCUMENTATION
Student Needs Meets the needs of students eligible for admission [55002(b)(1)]	▨ ☐	Definition of appropriate target population
Outline *Each section completed with enough information to permit assessment in terms of this checklist* [55002(a) and (b)(3)]	▨ ☐	Completed Application for Course Approval
Content *Content introduces students to the key concepts and methods of a discipline*	▨ ☐	Syllabus submitted with the application listing: topics texts or other materials to be used
Pre-Requisites/Entry level skills Pre-requisites are clearly stated and justified. If course objectives call for regular reading or writing assignments, students must be eligible for a course no more than one level below English 1A. If they call for mathematical understanding, students must be eligible to take Algebra. (Pre-requisites are valid; ways to meet pre-requisites are available)	▨ ☐	Stated Pre-Requisites or Co-Requisites and Information upon the tendency of students who lack required skills to do poorly in the course or, for vocational courses, information regarding employer expectations. or Recommend requisites
Quality of Assignments To successfully complete assignments students must: Comprehend college level reading and lectures *Analyze, synthesize, criticize, solve problems, apply principles*	▨ ☐ ▨ ☐	**All of the following:** Examples of typical weekly assignments Brief descriptions of term papers, projects, activities, or other long term assignments Evidence of difficulty of assignments
Quantity of Assignments Students must complete work outside of class, without direct instructional supervision, for an average of **two hours per week for each unit**	▨ ☐	Either: Assignments indicated in the syllabus OR Stated intention to assign work in a certain ratio
Type of Evaluation All students are evaluated against a common standard based on their ability to Answer essay questions *requiring analysis and/or the relating of parts of the course to each other, or to practical applications* or Solve problems* or Demonstrate a skill*	▨ ☐	Either Type of test OR Description of other evaluation techniques including at least one specific example and a statement of the criteria
Limits Repeatability Course may not be taken for credit a second time except to bring up an unacceptable grade, or under the special provisions of 51000, 55761-3, 56044 and 58161. If course substantially duplicates content of another course, credit is permitted for only one.	▨ ☐	Either Statement in the application OR Publication of limits on repeatability in catalog

☐ **Comments on back**

☐ **Recommended for approval**

☐ **Not recommended for approval (see back)**

Signature of Reviewer ______________ Date ______________

Title ______________ Phone No. ______________

* If deemed approriate by curriculum committee.

Comments

☐ In order to quality for the credit category requested, the following changes or clarifications are needed:

☐ **Not Recommended for Approval**

Reasons:

Course Title

Course *approved* as:

MODEL Checklist for Classification **CURRICULUM COMMITTEE REVIEW**

	☐ **DEGREE CREDIT**	☐ **NON-DEGREE CREDIT**	☐ **NONCREDIT**
OUTLINE Objectives, Scope Content ☐☐ ☐ = Yes ☐ = No	☐☐ Common to all students (55002a4) ☐☐ Covered by 58505.5a-e ○ Transfer ○ Non-baccalaureate occupational major ○ If English: 1 level below Eng 1A or less ○ If Math: Algrebra or above ○ Equivalent English or Math OR (55805.5) ☐☐ *Introduces students to the key concepts and methods of a discipline* (55002a12 "College Level")	☐☐ Common to all students (55002b4) ☐ *Prepares students to succeed in the type of courses in 55805.5* OR ☐ *One of a sequenced series of courses whose final objective is the acquisition of such skills* OR ☐ A special class that facilitates measurable progress toward an educational goal (56030c) OR ☐ *Prepares students for a non-college-oriented occupation* OR ☐ None of the above	☐☐ Mutual Agreement with K-12 ☐☐ Covered by EC84711 ○ Parenting ○ Adult Basic Education ○ English as a Second Language ○ Citizenship for Immigrants ○ Substantially Handicapped ○ Short-term Vocational ○ Training with High Employment Potential ○ Older Adults ○ Home Economics ○ Health and Safety
Required Assignments	☐☐ College Level Reading (55002a11 & 12) ☐☐ Critical Thinking: *Requires analysis, synthesis, evaluation, and/or problem solving* (55002a10)		
Homework	☐☐ Scope and intensity of work requires independent study outside of class (55002a7) ☐☐ Quantity: 2 hours per week per one hour class time per unit or equivalent (55002a6)	☐☐ *Amount of student work required per unit of credit earned is the amount reuqired by curriculum committee for non-degree courses* (55002b6)	
Evaluation	☐☐ Measures student performance in terms of stated objectives (55002a6) ☐☐ Bases grades on demonstrated proficiency in subject matter (55002a6) ☐☐ Bases graded on essay unless problem solving or skill demonstration is more appropriate (55002a6)	☐☐ Measures student performance in terms of stated objective (55002b5)	☐☐ States method for determining whether course objectives have been met (55002c4)
GRADE	☐☐ Culminates in a formal grade based on uniform standards (55002a9)	☐☐ Culminates in a formal grade based on uniform standards (55002b5)	
PRE/CO-REQUISITES	☐☐ Language and computational skills, if needed, are sufficient for enrollment in AA degree level courses (55002a9)		
REPEATABILITY	☐☐ Repeatable only under 51000, 55761-3, 56044, 58116 (55002a13)	☐☐ Repeatable only under 51000, 55761-3, 56044, 58161 (55002b)	

Print College Name Here

Static Course ID ______ Requested TOPS # ______

Credit category requested:

☐Degree ☐Non-degree ☐Noncredit

Approved Top# ______

(if different)

Reviewer ______ Phone # ______

Comments on Back? Yes ☐ No ☐

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Italicized sections are working interpretations of law or regulations.

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COMMENT

☐ **COURSE IS NOT RECOMMENDED FOR APPROVAL**

Reasons:

Curriculum Committee Reviewer

Date Phone No.

☐ **COURSE NOT APPROVED**

Official of Curriculum Committee

Date Phone No.

SAMPLE FORMS AND PROCEDURES
Contra Costa College

1/87

DEPARTMENT STANDARDS FOR OUT-OF-CLASS COURSE WORK

CONTRA COSTA COLLEGE

To complete the State-mandated requirements for academic standards, each Department (program) of the College must establish its own standards for determining the required out-of-class work per hour for graduation credit courses.

DIVISION: ______________________________

DEPARTMENT: ______________________________

DATE: ____________

The following minimum out-of-class work standards were approved at a Division meeting held on (specify date) ____________ for ____________________ department.

1. Number of pages of writing required of students out-of-class per hour: ____________ pages

2. Number of pages of reading required of students out-of-class per hour: ____________ pages

3. All problem solving assignments or skill development practice must be sufficient to fulfill the work-per-unit requirement.

SIGNED:

Department Representative ____________________

Division Chairperson ____________________

Area Dean ____________________

PLEASE SEND THIS COMPLETED FORM TO COLLEGE DEAN

Form ASII

DRAFT

GRADUATION CREDIT COURSE
CHECK-OFF FORM

Course Department and Number ________________________________

Course Title ________________________________

[ ] I. College Instruction Committee must recommend each course [55002a(1)].

The date of the meeting at which this course was recommended was_______________. (Minutes of the College Instruction Committee are on file in the office of the College Dean)

[ ] II. The Governing Board must approve each course [55002a(1)].

The date of the meeting at which this course was approved was___________________. (Minutes of Governing Board meetings are on file in the Office of the President)

[ ] III. The instructor must be credentialed [55002a(2)].

All instructors of this course have credentials.

____
Area Dean

(Information on instructor's credentials is maintained in the District Office. A current schedule listing the teacher of record for all courses is available from the office of the College Dean)

[ ] IV. A complete course outline must be on file [55002a(3)]

[ ] A. A course outline for this course is part of this file

[ ] B. A Worksheet on Course Academic Standards is part of this file

[ ] C. The outline includes:

[ ] 1. The scope and content of the course.

[ ] 2. The number of units students earn by completing the course.

☐ 3. The objectives of the course.

☐ 4. The teaching methods used for the course.

D. The Worksheet includes:

☐ 1. The homework assignments for the course, including reading and writing assignments.

☐ 2. The evaluation methods used for the course.

V. Instructional objectives must be common to all students [55002a(4).

☐ The instructional objectives are common to all students as confirmed by the course outline and worksheet as submitted by an instructor and reviewed and approved by the College Instruction Committee.

VI. Essays must be required unless problem solving or skill demonstration is more appropriate [55002a(5)].

☐ This standard is met as confirmed by the course outline and worksheet as submitted by an instructor and approved by the College Instruction Committee.

VII. A formal grade must be assigned [55002a(5)].

☐ This standard is met as confirmed by the course outline and worksheet as submitted by an instructor and approved by the College Instruction Committee.

VIII. Three hours of work per week must be required per each unit awarded at completion [55002a(6)].

☐ This standard is met as confirmed by the course outline and worksheet as submitted by an instructor and approved by the College Instruction Committee.

IX. Some work outside of class must be required even if Standard VIII is met by work in class [55002a(9)].

☐ This standard is met as confirmed by the course outline and worksheet as submitted by an instructor and approved by the College Instruction Committee.

X. Pre-requisites or concurrent enrollment must be required when needed for success in the course [55002a(9)].

[ ] Pre-requisites or requirements for concurrent enrollment have been specified in the catalog and schedule in accordance with the worksheet as approved by the College Instruction Committee.

Area Dean
(The current catalog and schedule are on file in the office of the College Dean)

XI. The course must require college level language and computational skills [55002a(9).

[ ] This standard is met as confirmed by the course outline and worksheet as submitted by an instructor and approved by the College Instruction Committee.

XII. The course must require critical thinking, college level vocabulary and learning skills [55002a(10-11)].

[ ] This standard is met as confirmed by the course outline and worksheet as submitted by an instructor and approved by the College Instruction Committee.

XIII. The course must require college level educational materials [55002a(12)].

[ ] This standard is met as confirmed by the course outline and worksheet as submitted by an instructor and approved by the College Instruction Committee.

XIV. The course may be repeated [55002a(13) and Division 2, section 55761-55763, 58161]

[ ] Once to remediate a "D" or "F" grade. In addition, it may be repeated not more than three additional times if:

[ ] A. It is a skill class in which it is reasonable to expect the skill level to increase with each repetition. This course is repeatable under this provision and has been so approved by the Curriculum Committee.

[ ] B. The context of the course changes from semester to semester so that we would be using different numbers. (For example, a course in opera which deals with German operas one semester, Italian operas another.)

This course claims to be repeatable under this provision. This file contains detailed information as part of the course outline and worksheet.

C. In no case may a family of courses be taken for a total of more than 4 times under A or B (for example, beginning, intermediate, and advanced tennis are a family).

XV. The course must fit one of the following catagories [55805.5,

☐ A. It is acceptable as a lower division course that counts toward the baccalaurate at:

1. California State University at ____________________

2. University of California ________________________

(College articulation agreements are on file in the office of the College Dean)

☐ B. It applies to the major in a non-baccalaurate occupational field (Major requirements are listed in the college catalog which is available in the office of the College Dean).

☐ C. It is an English course not more than one level below 1A (the first transfer level composition course).

Information on the English Program is in the College Catalog which is available in the office of the College Dean.

☐ D. It is a math course in Elementary Algebra or above. (The course description is part of the course outline which is available in this file)

☐ E. It is a course which teaches math or English but not taught in these departments which does, however, meet the standards of 3 and 4 above, ie., if an English course, it is not more than one level below 1A; if a math course, it is equivalent to Elementary Algebra or higher. (The course description is part of the course outline, which is available in this file.)

3/87

WORKSHEETS ON COURSE ACADEMIC STANDARDS
CONTRA COSTA COLLEGE

INSTRUCTIONS: These forms on Academic Standards must be completed for **EACH** course in the curriculum that applies toward completion of the Associate Degree (graduation). When completed, the forms should be forwarded to the College Dean for review by the Instruction Committee. (Note: All information requested on these worksheets are required by State mandate.)

INTRODUCTION

A. Course subject and number: ______________________________

B. Course title: ______________________________

C. Name of instructor(s) submitting this form: ______________________

D. Graduation Credit: (check one)

_____ This course should NOT apply toward graduation. This form is being submitted so the information can be used for the Course Expectations document.

_____ This course should apply for graduation credit.

E. This course has been articulated as transferable to CSU or UC.

_____ YES _____ NO Articulation Officer Initials: _________

I. STANDARD 1: Collegiate in Vocabulary and Educational Materials

A. Assigned Textbooks (List by title and author)

1.

2.

3.

B. Grade level of each text (attach readability scores on computer printout).

C. If texts assigned have readability scores below grade 12 for four (4) or more of the text standards, then list below at least three other colleges that use the text for a graduation credit course.

	Text 1	Text 2	Text 3
College 1:	____________	____________	____________
College 2:	____________	____________	____________
College 3:	____________	____________	____________

D. If the text is both below 12th grade on four or more standards AND is not (to your knowledge) used for graduation credit courses at three or more other colleges, then your division or a committee of your division (not including instructors of the class) must review the text and agree that it is collegiate level.

The following people met and reviewed the text:

____
Date

They [ ] agreed [ ] disagreed that it was collegiate level.

____
Division Chair

II. STANDARD 2: Writing and Critical Thinking Requirement

(Note: All graduation credit courses must require essay writing as part of how students are graded unless essays are inappropriate to course objectives, AND problem solving or skills demonstrations are more appropriate. An essay is defined as a writing assignment completed in class or outside of class, AND submitted to the teacher AND graded.)

To meet the requirements of this standard, please follow these instructions:

A. Attach to these worksheets BOTH
   1. A sample test used for the course demonstrating essay writing or the alternative described above;
   2. A sample of other typical course assignments demonstrating essay writing or the alternative described above.

B. Attach a course syllabus which specifies how grades will be calculated. Be certain that the procedure provides for 50% or more of the grade in the course to be the result of evaluation of essay assignments OR, if inappropriate as explained above, show how problem-solving assignments or skills demonstrations are used to provide for 50% or more of the grade.

C. If the essay assignments (or alternative described above) constitute LESS than 50% of the grade, then the division or a committee of the division must review the arrangements and exams, or samples of these, on which the grade is based to determine whether the arrangements do require students to analyze,synthesize, and evaluate the material they learn (memorization alone is not acceptable). Further, that the course is collegiate level in the critical thinking skills required of students, in learning skills required of students, and in concept usage required of students.

The following people reviewed the assignments:

____
Date

They [ ] agreed [ ] disagreed that they are collegiate level in critical thinking, learning skills, and concept usage required for satisfactory completion.

____
Division Chair

The materials reviewed by the committee must be submitted with this form to be retained in the permanent file for this course.

III. STANDARD 3: Required Entry-level Skills

A. Indicate ENGLISH prerequisite: (NOTE: IF this course requires writing, then to be considered as a graduation credit course, the prerequisite writing skill level must be parallel to the prerequisites for English 142B, 143B, 145B or 1A.)

_____ 1. Skills sufficient for entry to English 142B, 143B, or 145B.

_____ 2. Concurrent enrollment in English 142B, 143B, or 145B.

_____ 3. Completion of English 142B, 143B,in 145B, or eligibility for English 1A.

_____ 4. Completion of English 1A or eligibilty for English 1B.

(Add an explanation for faculty of what kind of writing can reasonably be expected of students at each level.)

B. Indicate MATHEMATICS prerequisite: (NOTE: IF this course requires prerequisite mathematical skills, then to be considered as a graduation credit course, the prerequisite math skill level must be parallel to the prerequisites for elementary algebra, Math 118, or higher.

☐ No mathematics prerequisite required

☐ Skills sufficient for entry to mathematics 118, Elementary Algebra are required

☐ Concurrent enrollment in mathematcis is required

☐ Completion of mathematics is required

C. List other course prerequisites:

IV. STANDARD 4: Required Out-of-Class Work per Hour

Students are required to complete out-of-class assignments for graduation-level credit courses. The number of hours of out-of-class assignments required per course is dependent on the type of course (lecture/lab) and the numbers of hours per week of in-class work.

Each Department must agree on the minimum out-of-class work that will reasonably constitute one hour of effort, using the categories below. A special form specifying the department's minimum standards must be completed (Form ASII) and attached to this packet.

Please complete:

A. Number of papers required of students: _____

Number of pages required for each paper: _____

B. Number of pages of reading required for the term: _____

Number of pages assigned per week: _____

List below the title and author of required reading assignments:

C. Number of problems to be required each week: ________
(Estimate the amount of time needed to solve a typical problem by a student and indicate any related required reading by number of pages and title/author of material)

D. Required hours of practice per week: ________
(Indicate how the instructor determines whether or not the practice was performed)

E. If this course does NOT meet or exceed the standards established for this descipline, then the division or a committee of the division (not including the instructor(s) of this course) must review a syllabus or other list of assignments for the class and, if necessary, sample arrangements to determine whether the appropriate number of hours of work outside class are being required.

The following people reviewed the assignments:

____
Date

They [ ] agreed [ ] disagreed that students would spend ____ hours of work outside of class per week.

____
Division Chair

The materials the committee reviewed must be submitted with this form and kept in the permanent file for this course.

CONCLUSION

YOU HAVE COMPLETED THE WORKSHEETS FOR ACADEMIC STANDARDS. PLEASE REVIEW THE WORKSHEETS TO BE CERTAIN YOU HAVE COMPLETED ALL NECESSARY ITEMS AND ATTACHED ALL REQUIRED DOCUMENTS.

AS A REMINDER, YOU MUST ATTACH:

1. Readability test scores (Standard III. B.)
2. Sample tests and assignments (Standard IV. A.)
3. Course syllabus (Standard IV. B.)
4. Also attach a course outline.

PLUS, BE CERTAIN THAT YOU HAVE DEPARTMENT AND DIVISION APPROVALS IF APPROPRIATE, AND THAT THE DEAN REVIEWS THIS PACKET.

NOW, PLEASE SEND ONE COPY OF THIS WORKSHEET PACKET FOR EACH COURSE TO THE COLLEGE DEAN'S OFFICE FOR REVIEW BY THE INSTRUCTION COMMITTEE.

Signature of faculty completing this form: ______________________________

Area Dean Signature indicating administrative review of this packet:

______________________________________ Date: __________________________

SAMPLE FORMS AND PROCEDURES
Gavilan Community College

GAVILAN COLLEGE **Curriculum Development**

FORM A PRELIMINARY REQUEST FOR NEW COURSE (ALL)
Readings Required 1

1. Department: ____________ Date Request Initiated: ________

2. Prepared & Submitted by: ____________ Proposed Units: ______
Lec ____ Lab ____

3. Proposed Discipline Name: ____________
Proposed Discipline No.: ____________

Proposed Course Title: ____________

Disc No. 0- 98 Transfer & Degree Appropriate
100-198 Degree Appropriate & Non Transfer
200-298 Non-Degree Appropriate & Non-Transfer
99, 199, 299 Emergency, One-term, Special Topics Course

4. Anticipated enrollment: ____________

5. Summary of probable content:

6. a. Justification for course: (Use reverse side)
b. List some agencies, groups consulted to determine need; ie., State Boards, advisory committees, surveys, other colleges' offerings, etc.

7. Anticipated personnel, equipment, and space requirements:

8. Possible instructional methodology:

RECEIVED
California Community Colleges

9. Prerequisites to be enforced:

10. Proposed grading system: _____ Regular A B C D F _____ Credit/Non-credit

11. ROUTING:

Approval--if NO, state reason below:

			YES	NO
Department Chair ____________	Date	______	______	______
Dean ____________	Date	______	______	______
Curriculum Committee ____________	Date	______	______	______

Comments/Rejection:

revised November 1986 Page 1 of 1

CURRICULUM DEVELOPMENT PROCESS

Requirement identified based upon surveys, advisory committees, other college offerings, etc.

Initiator:

a. Research and coordinate all information.
b. Discuss course with appropriate faculty.
c. Prepare all documentation.
d. Submit documentation to Department Chair(s) for approval.
e. Attend appropriate Curriculum Committee meetings.

Department Chair:

a. Review all documentation for completeness and content. Conduct/require further investigation and coordination as necessary. (Texts, requisites, other departments, etc).
b. Obtain departmental approval of the proposal at a formal meeting.
c. Submit all required documentation to the appropriate dean for approval.
d. Represent initiator if unavailable at the appropriate Curriculum Committee meetings(s).

Appropriate Dean

a. Review all documentation for completeness and content. Conduct/require further investigation as necessary. articulation, budget, LRC, etc.)
b. Submit required documentation to the Curriculum Committee through the Office of Instruction not later than one (1) week prior to action.
c. Attend all Curriculum Committee meetings.

Dean of Instruction/Curriculum Committee Chair

a. Review all documentation prior to each Curriculum Committee meeting for completeness and content.
b. Coordinate with appropriate dean for required actions.

Curriculum Committee

a. Review all documentation for completeness and content.
b. Insure college, district, and state guidelines and standards are being followed.
c. Require further action and coordination as necessary.
d. Submit approved courses to the District Board for approval.

GAVILAN COLLEGE

Curriculum Development

FORM BI

RECOMMENDATION FOR DEGREE APPLICABLE COURSE

Readings Required: 1
Attachments Required: Course Outline

---

1. Department: ____________ Date Request Initiated: ____________

Prepared/Submitted by: ______________________

2. Suggested discipline name, number, title, units, lecture, lab:

Discipline Name	Number	CAN	Course Title	Units	Lec	Lab

3. Proposed grading system: ____ Regular A B C D F ____ Credit/Non-Credit

4. Justification of recommendation: (e.g. requirement for major's sequence, G.E., etc.)

5. Similar course already in catalog? ____ Yes ____ No (Explain need for new course

6. Similar course offered in colleges or universities? Yes ____ No ____
(give information below - 2 schools minimum)

Subject	Discipline and No.	Title	College or University

Subject	Discipline and No.	Title	College or University

If no, explanation:

7. Outcome: (see Vice President/Dean of Instruction for help in completing)
Reviewed by Articulation Officer/Student Services

Transfer: Would you recommend that this be a course which transfers to:
State Universities and Colleges Yes ______ No ______
University of California Yes ______ No ______

General Education Area: Would you recommend this course satisfy the following G.E. Requirements?

	Nat Sci	Soc Sci	Human	Lifelong Learning	Commun
State Universities and Colleges					
A. A. Degree					

Program Outcome: Will this course be required for:
Associate Major in ____________ Certificate/Occupational Major in ____________

OFFICE USE ONLY:
______ Course Outline ______ MFC
______ Catalog Insert ______ Catalog

RECOMMENDATION FOR NEW COURSE

FORM B1

8. Suggested Time Offered: Day ________ Night ________ Day or Night ________

9. Anticipated Enrollment

1st term _____ 2nd term _____ 3rd term _____ 4th term _____

10. Effect on College:

a. Staffing:

b. Facility Usage:

c. Equipment Needs

d. L.R.C. Resources: (must be reviewed by College Librarian or LRC Director)

e. Other:

11. ROUTING: APPROVAL – If no, state reason below

LRC Director/College Librarian: ____________________ Date: __________ Yes___ No___
Department Chairperson: ____________________ Date: __________ Yes___ No___
Articulation Officer/
Dean of Student Services: ____________________ Date: __________ Yes___ No___
Curriculum Committee: ____________________ Date: __________ Yes___ No___
V.P./Dean of Instruction: ____________________ Date: __________ Yes___ No___
Superintendent/President: ____________________ Date: __________ Yes___ No___
District Board: ____________________ Date: __________ Yes___ No___
CCC Chancellors Office: ____________________ Date: __________ Yes___ No___
(if applicable)

12. COMMENTS/Reasons for Rejection

GAVILAN COLLEGE

Curriculum Development

FORM BI

RECOMMENDATION FOR DEGREE APPLICABLE COURSE

Readings Required: 1

Attachments Required: Course Outline

---

1. Department: ____________ Date Request Initiated: ____________

   Prepared/Submitted by: ______________________

2. Suggested discipline name, number, title, units, lecture, lab:

______	______	______	______________________	______	______	______
Discipline Name	Number	CAN	Course Title	Units	Lec	Lab

3. Proposed grading system: ______ Regular A B C D F ______ Credit/Non-Credit

4. Justification of recommendation: (e.g. requirement for major's sequence, G.E., etc.)

5. Similar course already in catalog? ______ Yes ______ No (Explain need for new course

6. Similar course offered in colleges or universities? Yes ______ No ______
   (give information below - 2 schools minimum)

Subject	Discipline and No.	Title	College or University
Subject	Discipline and No.	Title	College or University

If no, explanation:

7. Outcome: (see Vice President/Dean of Instruction for help in completing)
   Reviewed by Articulation Officer/Student Services

Transfer: Would you recommend that this be a course which transfers to:

State Universities and Colleges Yes ________ No ________

University of California Yes ________ No ________

General Education Area: Would you recommend this course satisfy the following G.E. Requirements?

	Nat Sci	Soc Sci	Human	Lifelong Learning	Commun
State Universities and Colleges	______	______	______	______	______
A. A. Degree	______	______	______	______	______

Program Outcome: Will this course be required for:

Associate Major in ______________ Certificate/Occupational Major in ______________

OFFICE USE ONLY:

________ Course Outlines ________ MFC

________ Catalog Insert ________ Catalog

RECOMMENDATION FOR NEW COURSE

FORM B1

8. Suggested Time Offered: Day ________ Night ________ Day or Night ________

9. Anticipated Enrollment

1st term _____ 2nd term _____ 3rd term _____ 4th term _____

10. Effect on College:

a. Staffing:

b. Facility Usage:

c. Equipment Needs

d. L.R.C. Resources: (must be reviewed by College Librarian or LRC Director)

e. Other:

11. ROUTING: APPROVAL - If no, state reason below

LRC Director/College Librarian: ____________________ Date: __________ Yes___ No___

Department Chairperson: ____________________ Date: __________ Yes___ No___

Articulation Officer/
Dean of Student Services: ____________________ Date: __________ Yes___ No___

Curriculum Committee: ____________________ Date: __________ Yes___ No___

V.P./Dean of Instruction: ____________________ Date: __________ Yes___ No___

Superintendent/President: ____________________ Date: __________ Yes___ No___

District Board: ____________________ Date: __________ Yes___ No___

CCC Chancellors Office: ____________________ Date: __________ Yes___ No___
(if applicable)

12. COMMENTS/Reasons for Rejection

DEGREE APPLICABLE COURSE OUTLINE

DISCIPLINE ______________________________ Dept. ____________________
(name and number)

COURSE TITLE: ____

SEMESTER UNITS: ________ HOURS PER WEEK: Lec. _______ Lab _____

Office Use Only

Computer Coded Title **(19 characters)**	**TR/CL**	**TOPS**	**SAM**	**LEH FACTOR**	**FTE LOAD**	**GRADED**

CATALOG DESCRIPTION:

COURSE REQUISITES: (Note: Appropriate pre- or co-requisites are required, especially for college-level English and/or computational skills, i.e., eligibility for English 250 and/or Math 205.)

REQUIRED TEXT:

Reading level:
Determined to be ______________________________ grade by ____________________________

OTHER MATERIALS REQUIRED TO BE PURCHASED BY THE STUDENT:

Prepared by: ________________________ Chair ________________________

____

discipline Name & Number

DESCRIPTION OF CONTENT/**behavioral objectives for Degree Appropriate Course**

WEEK	HOURS	CLASSROOM CONTENT	"OUT OF CLASS" ASSIGNMENT *	STUDENT PERFORMANCE OBJECTIVES **

---

*e.g. essays, library research, problems, projects required outside of class on a 2 to 1 basis for lecture units granted. Add at end of Weekly Course Content.

Discipline Name & Number

METHODS OF INSTRUCTION & EVALUATION: (Demonstration of proficiency in subject matter based in part by means of essays, or problem solving exercises or skills demonstration.)

GOALS EXPECTED OF THE STUDENT AT THE END OF THE COURSE: Complete this section in a manner that demonstrates students use of critical thinking. (e.g. are students required to only "list", "identify" or "describe"; or are they asked to "evaluate", synthesize", "judge", etc.)

SAMPLE FORMS AND PROCEDURES
Long Beach Community College District

____Degree Applicable
____Non-Degree Applicable#

Long Beach Community College District
Credit Course Outline

REVIEWED AND/OR REVISED DATES:

DIVISION ________________________ ____________________

DEPARTMENT________________________

COURSE TITLE ________ COURSE NO._______#
(5 CHARACTERS)

DESCRIPTIVE TITLE ______________________________ UNITS______
(40 CHARACTERS ONLY)

TOP CODE________ VEA CODE_______ CLASS SIZE MAX______ SAM CODE_____

INSTRUCTION CODE____ GRADE CODE GR___ GC___ CR___ NC___ DDSB CODE____

COURSE CLASSIFICATION CODE:______ TRANSFER CODE______

NUMBER OF HOURS:
a. per week* a.____ a.____ a.____
b per semester* TOTAL b.____ LECTURE b.____ LABORATORY b.____ TEACHING UNITS___
*based on a term of 18 weeks

PREREQUISITE(S):

CATALOG DESCRIPTION:

****

\#THIS COURSE WILL: (CHECK THOSE WHICH APPLY; 800 LEVEL COURSES DO NOT SATISFY THE "FIELD OF CONCENTRATION" FOR THE ASSOCIATE DEGREE)

_partially satisfy the "field of concentration" requirement for the Associate Degree.

Field: ________________________________

_partially satisfy a requirement for the following certificate program:

____

****

FINAL REVIEW.

________________________/_______ ________ASSOC. DEAN INITIAL
DEPARTMENT HEAD DATE ________DATE

________________________/_______
INSTRUCTIONAL DEAN DATE

"FOR NEW COURSES":
DATE OF BD. ACTION________
EFFECTIVE DATE________

________________________/_______
VICE PRESIDENT, ACADEMIC AFFAIRS DATE
04/87

CREDIT COURSE OUTLINE
____ DEGREE APPLICABLE
____ NON-DEGREE APPLICABLE

____
COURSE TITLE & NUMBER

COURSE OUTCOMES/OBJECTIVES:

List a limited number of major objectives in terms of the observable knowledge and/or skills to be attained as a result of completing this course.

METHODS TO MEASURE STUDENT ACHIEVEMENT:

Students in this course will be graded, at minimum, in at least one of the following three categories. Please check where appropriate; however, **a degree applicable course must have a minimum of one response in category 1, 2, or 3.** If category 1 is not checked, the department must explain why substantial writing assignments are an inappropriate basis for at least part of the grade.

1. Substantial writing assignments, including:
___ essay exam(s)
___ written homework
___ term or other paper(s)
___ reading report(s)
___ laboratory report(s)
___ other (specify)________________

If the course is degree applicable, substantial writing assignments in this course are inappropriate because:
___ The course is primarily computational in nature.
___ The course primarily involves skill demonstrations or problem solving.
___ Other rationale (explain)____
____
____

2. Computational or Non-computational problem-solving demonstrations, including:
___ exam(s)
___ laboratory report(s)
___ quizzes
___ field work
___ homework problems
___ other (specify)________________

3. Skill demonstrations, including:
___ class performance(s)
___ other (specify)____
___ field work
___ performance exam(s)

4. Objective examinations, including:
___ multiple choice
___ completion
___ true/false
___ other (specify)____________________________
___ matching items

A course grade may not be based solely on attendance.

____
COURSE TITLE & NUMBER

CREDIT COURSE OUTLINE
_____ DEGREE APPLICABLE
_____ NON-DEGREE APPLICABLE

COURSE OUTLINE:

COURSE TITLE & NUMBER ______________________

CREDIT COURSE OUTLINE
____ **DEGREE APPLICABLE**
____ **NON-DEGREE APPLICABLE**

COLLEGE LEVEL CRITICAL THINKING TASKS/ASSIGNMENTS:

Degree applicable courses must include critical thinking tasks/assignments. This section need not be completed for non-degree applicable courses.

REQUIRED READING, WRITING, AND OTHER OUTSIDE OF CLASS ASSIGNMENTS:

Over an 18 week presentation of the course three hours per week are required for each unit of credit. Two hours of independent work done out of class are required for each hour of lecture. Outside of the regular class time the students in this class will be doing the following outside of class:

___ Study
___ Answer questions
___ Skill practice
___ Required reading
___ Problem solving activity or exercise
___ Written work (essays/compositions/report/analysis/research)
___ Journal (reaction and evaluation of class, done on a continuing basis throughout the semester)
___ Observation of or participation in an activity related to course content (e.g., play, museum, concert, debate, meeting, etc.)
___ Other (specify)____

APPROPRIATE TEXTS AND MATERIALS:

For degree applicable courses the adopted texts, as listed in the college bookstore, or instructor prepared materials have been certified primarily to contain college-level materials.
___ Yes
___ No

For all courses a list of required and recommended materials is maintained in the college bookstore.

Long Beach City College
Standards and Criteria For Associate Degree Credit Courses
Worksheet

Course-Title-Num: ______________________________

Using the Official Course Outline, please determine whether or not this course meets at a minimum the following standards and criteria required in Title 5, Part VI, of the California Administrative Code. Place a mark (x) in the appropriate column and sign at the appropriate point below.

	Criteria and Standards **Section 55002**	**Rating** **Criterion Met**	**Rating** **Criterion Not Met**
(1)	Is recommended by the curriculum committee and approved by the board.	________	________
(2)	Is taught by a credentialed instructor.	________	________
(3)	Is offered as described in an outline in official college files. The outline shall specify the following:		
	• unit value, scope, objectives and content in terms of a specific body of knowledge	________	________
	• required writing and reading, and other outside of class assignments	________	________
	• teaching methods	________	________
	• methods of evaluation for determining if stated objectives have been met	________	________
(4)	Is taught with instructional objectives common to all students enrolled in the course (not just the particular course section).	________	________
(5)	Provides for measurement of student performance in terms of stated course objectives, which culminates in a formal recorded grade based upon uniform standards. Bases grades on demonstrated proficiency in subject matter, at least in part†, by means of		
	• substantial writing assignments (which may include essay examinations), or, as deemed appropriate by course (not class section),	________	________
	• problem solving exercises or	________	________
	• skills demonstration	________	________
	†Note: A course grade could not be based solely on attendance.		
(6)	Grants units of credit based on the number of lecture and lab hours, as specified by the board, and requires a minimum of three hours of work per week (including class time) for each unit of credit in a full semester course.	________	________

	Criteria and Standards **Section 55002**	**Rating** **Criterion Met**	 **Criterion Not Met**
(7)	Presents material with a scope and intensity such that students are required to study outside of class time.	________	________
(8)	Requires, as deemed appropriate by the curriculum committee, entrance skills and prerequisites for the course prior to enrollment	________	________
(9)	Requires, as a pre- or corequisite in courses other than English and Math, eligibility for enrollment in associate degree level English and/or Math courses when the curriculum committee deems that associate degree level language (composition, reading) and/or computational skills are necessary for success in those courses.	________	________
(10)	Requires college level* critical thinking and understanding/application of concepts.	________	________
(11)	Requires college level* learning skills and vocabulary.	________	________
(12)	Requires college level* educational materials.	________	________
(13)	Follows course repetition rules	________	________
	* College level as determined by the curriculum committee.	________	________

If you have checked "criterion not met" on any of the standards above, you have two options: (1) reclassify the course to non-degree applicable; or (2) upgrade the course to meet these standards and provide a plan of action below. In either case, you must prepare the appropriate curriculum documents.

Instructor ________ Date ________ Associate Dean Initials ________

Department Head ________ Date ________

Instructional Dean ________ Date ________

Long Beach City College
Standards and Criteria For
Credit Courses Not Applicable To The Associate Degree
Worksheet

Course-Title-Num: ______________________

Using the Official Course Outline, please determine whether or not the above listed credit course meets at a minimum the following standards and criteria required in Title 5, Part VI, of the California Administrative Code, and which has been designated as not appropriate to the Associate Degree. Place a mark (x) in the appropriate column and sign at the appropriate point below.

Criteria and Standards Section 55002	Rating Criterion Met	 Criterion Not Met
(1) Is recommended by the curriculum committee and approved by the board.	________	________
(2) Is taught by a credentialed instructor.	________	________
(3) Is offered as described in an outline in official college files. The outline shall specify the following:		
• unit value, scope, objectives and content in terms of a specific body of knowledge	________	________
• required writing and reading, and other outside of class assignments	________	________
• teaching methods	________	________
• methods of evaluation for determining if stated objectives have been met	________	________
(4) Is taught with instructional objectives common to all students enrolled in the course (not just the particular course section).	________	________
(5) Provides for measurement of student performance in terms of stated course objectives, with uniform standards.	________	________
(6) Grants units of credit based on the Carnegie unit concept.	________	________
(7) Requires, as deemed appropriate by the curriculum committee, completion of prerequisites prior to enrollment.	________	________
(8) Follows course repetition rules.	________	________

______________________ Instructor   ________ Date   ________ Associate Dean Initials

______________________ Department Head   ________ Date

______________________ Instructional Dean   ________ Date

If you have checked "criterion not met" on any of the standards above, you have two options: (1) reclassify the course to non-credit, if it falls within the entitlement areas; or (2) upgrade the course to meet the standards. Use the back to note your plan of action.

Long Beach City College
Standards and Criteria For Noncredit Courses Worksheet

Course-Title-Num: ____________

Using the Official Course Outline, please determine whether or not this non-credit course meets at a minimum the following standards and criteria required in Title 5, Part VI, of the California Administrative Code. Place a mark (x) in the appropriate column and sign at the appropriate point below.

Criteria and Standards Section 55002	Rating Criterion Met	 Criterion Not Met
(1) Is recommended by the curriculum committee and approved by the board.	____	____
(2) Is taught by a credentialed instructor.	____	____
(3) Treats subject matter, uses resource materials, teaching methods and standards of attendance and achievement as deemed appropriate by the curriculum committee.	____	____
(4) Is offered as described in an outline in official college files. The outline shall specify the following:		
• scope, objectives and content	____	____
• teaching methods	____	____
• methods of evaluation for determining if stated objectives have been met	____	____
(5) Mutual agreement with K-12. (Ed Code 8512 and 8530-8534)	____	____

If you have checked "criterion not met" on any of the standards above, you have two options: (1) reclassify the course to community services; or (2) upgrade the course to meet these standards and provide a plan of action below. In either case, you must prepare the appropriate curriculum documents.

Instructor ____________ Date ____________ Associate Dean Initials ____________

Department Head ____________ Date ____________

Instructional Dean ____________ Date ____________

LONG BEACH COMMUNITY COLLEGE DISTRICT
NONCREDIT COURSE OUTLINE

REVIEWED AND/OR REVISED DATES: ____________

DIVISION ____________

DEPARTMENT ____________

COURSE TITLE ____________ COURSE NO. ____________
(5 characters)

DESCRIPTIVE TITLE ____________ UNITS 0
(40 characters only)

TOP CODE ______ VEA CODE ______ CLASS SIZE MAX. ______ SAM CODE ______

METHOD OF INSTRUCTION CODE ____ GRADE CODE - GR___ GC___ CR___ NC x DDSB CODE ______

COURSE CLASSIFICATION CODE: ______ TRANSFER CODE: 0

NUMBER OF HOURS:

	TOTAL	LECTURE	LABORATORY	
a. per week*	a. ______	a. ______	a. ______	
b. per semester*	b. ______	b. ______	b. ______	TEACHING UNITS ____

*based on a term of 18 weeks

PREREQUISITE(S):

CATALOG DESCRIPTION:

ENTITLEMENT AREA (check one)

- ____ Parenting
- ____ Adult Basic Education
- ____ English as a Second Language
- ____ Citizenship for immigrants
- ____ Short-term vocational training with high-employment potential
- ____ Substantially handicapped
- ____ Older Adults
- ____ Home Economics
- ____ Health and Safety

FINAL REVIEW:

______ / ______
DEPARTMENT HEAD DATE

______ / ______
INSTRUCTIONAL DEAN DATE

______ / ______
VICE PRESIDENT/ACADEMIC AFFAIRS DATE

☐ ASSOCIATE DEAN INITIALS

"FOR NEW COURSES":
DATE OF BOARD ACTION ______
EFFECTIVE DATE ______

NONCREDIT COURSE OUTLINE

____

COURSE TITLE & NUMBER

COURSE OBJECTIVES:

Identify the three most important objectives of the course (other objectives may exist in addition to these three). No order of importance is requested and all three objectives may be chosen from any one group.

GROUP ONE: SKILL DEVELOPMENT-APPLICATION

_____ Knowledge skills-- The ability to relate general or specialized knowledge relevant to a problem and to implement a solution; also, the ability to locate, retain, and apply relevant knowledge.

_____ Critical thinking and reasoning skills-- The ability to formulate and analyze problems and to employ rational processes to achieve increased understnding (e.g., the recognition of biased points of view in a speech or a book; the recognition of cause-and-effect relationships).

_____ Creative skills-- The ability to design, produce, or otherwise bring into existence original perspectives, explanations, and implementations (e.g., the productions of unique communication; the development of an effective plan or solution to a problem; or the creation of works or art).

_____ Communication skills-- The ability or competence to read, write, speak, and listen. The ability to convey information, attitudes, emotions, etc.; and also, the ability to receive and interpret communications. These skills also encompass normal, nonwritten expression and perception.

_____ Motor skills-- The ability or competence in tasks requiring physical dexterity and skill.

GROUP TWO: PERSONAL DEVELOPMENT

_____ Physical health-- The physical well-being of students.

_____ Mental health-- The mental well-being of students.

_____ Change/Stability-- Attitudes toward new and different ideas, relationships, products or methods. The desire to introduce, avoid, or be associated with changes.

_____ Self-concept-- The feeling and acceptance of oneself as having basic worth and value.

GROUP THREE: GENERAL KNOWLEDGE

_____ Broad general theory in the discipline.

_____ Social attitudes in terms of the relationship of the individual studnet to the discipline.

_____ Cultural knowledge relating the discipline to the culture.

_____ Mastering of basic principles facts, and vocabulary of the discipline.

____
COURSE TITLE & NUMBER

NONCREDIT COURSE OUTLINE

METHODS TO MEASURE STUDENT ACHIEVEMENT:

Check as many as apply.

_____ Class participation
_____ Laboratory Work
_____ Attendance
_____ Examinations
_____ Other (specify)____

_____ Class assignments
_____ Quizzes
_____ Standardized exit exams

PROCESS FOR ASSESSMENT OF COURSE EFFECTIVENESS:

Please identify the primary method utilized to evaluate the degree to which the course objectives were accomplished (check one).

_____ Standardized instrument measuring student subjective opinion
_____ Standardized instrument objectively measuring student knowledge
_____ Student satisfaction with his/her educational experience
_____ Competency based written and practical tests which demonstrate the students' ability to apply skills and concepts learned to minimum standards established by the instructor
_____ California Occupational Program Evaluation System (COPES)

TEACHING MATERIALS:

Identify below the primary teaching materials utilized in the course. (check only one) It is recognized that additional materials may be used and they may vary from time to time.

_____ Published textbook
_____ Teacher-prepared instructional materials
_____ Tapes, videotapes, films, slides or other audio-visual mateials
_____ Computer-assisted instruction
_____ District/college-prepared materials
_____ Equipment, tools and materials

NONCREDIT COURSE OUTLINE

COURSE TITLE & NUMBER

COURSE OUTLINE:

153

COURSE TITLE & NUMBER

NONCREDIT COURSE OUTLINE

COURSE OUTLINE (continued):

LONG BEACH COMMUNITY COLLEGE DISTRICT
COMMUNITY SERVICES COURSE INFORMATION

COURSE-TITLE: CSERV COURSE NO.__________ DDSB: CSC

DESCRIPTIVE TITLE____________________ FEE:__________
(40 characters)

________Community Services Course ________Community Services Activity

COURSE or ACTIVITY DESCRIPTION:

Please determine whether or not the community service course or activity described above meets at a minimum the following standards and criteria required in Title 5, Part VI, of the California Administrative Code. Place a mark (x) in the appropriate column:

Criteria and Standards Section 55002	Rating	
	Criterion Met	Criterion Not Met
(1) Is approved by the board.	See Below	
(2) Is designed for the physical, mental, moral, economic or civic development of enrollees.	______	______
(3) Treats subject matter, uses resource materials and teaching methods as deemed appropriate by the board.	______	______
(4) Is conducted according to a predetermined plan.	______	______
(5) Is open to all members of the community.	______	______
(6) Will not be claimed for apportionment. (ADA)	______	______
(7) Is self supporting (78305 Ed code)	______	______

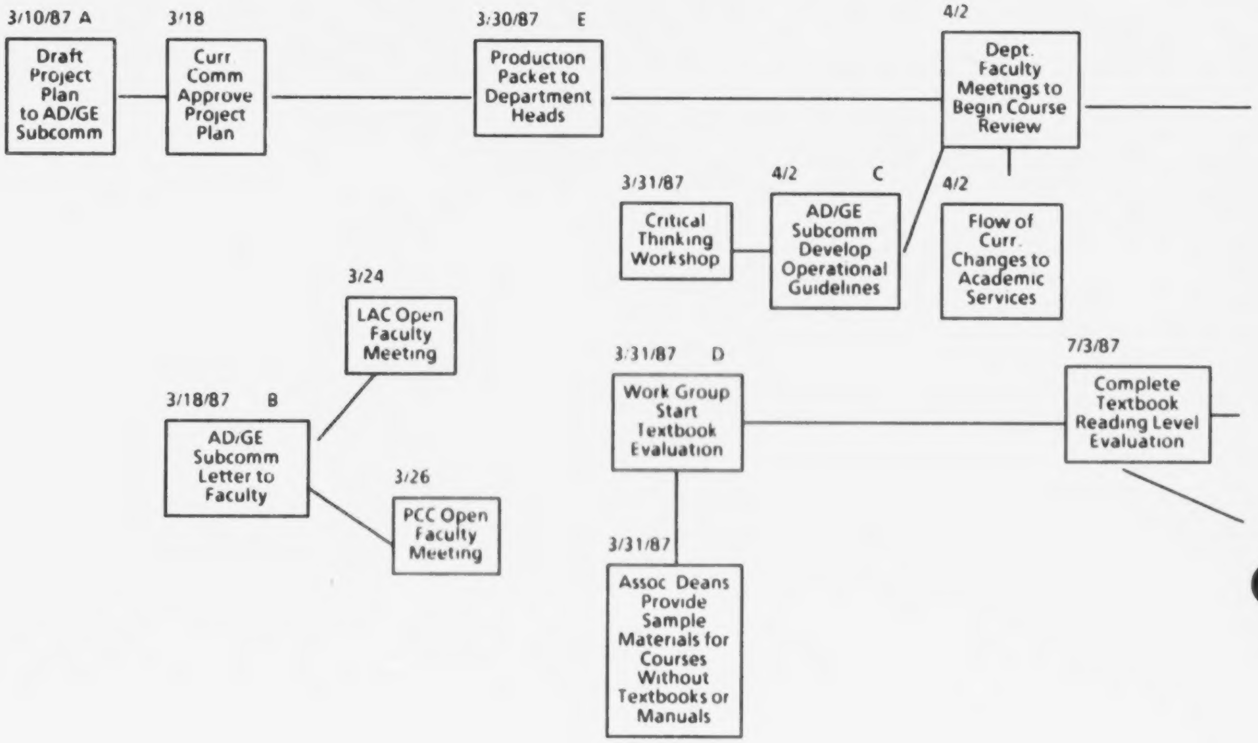
FINAL REVIEW FOR LEGAL REQUIREMENTS:

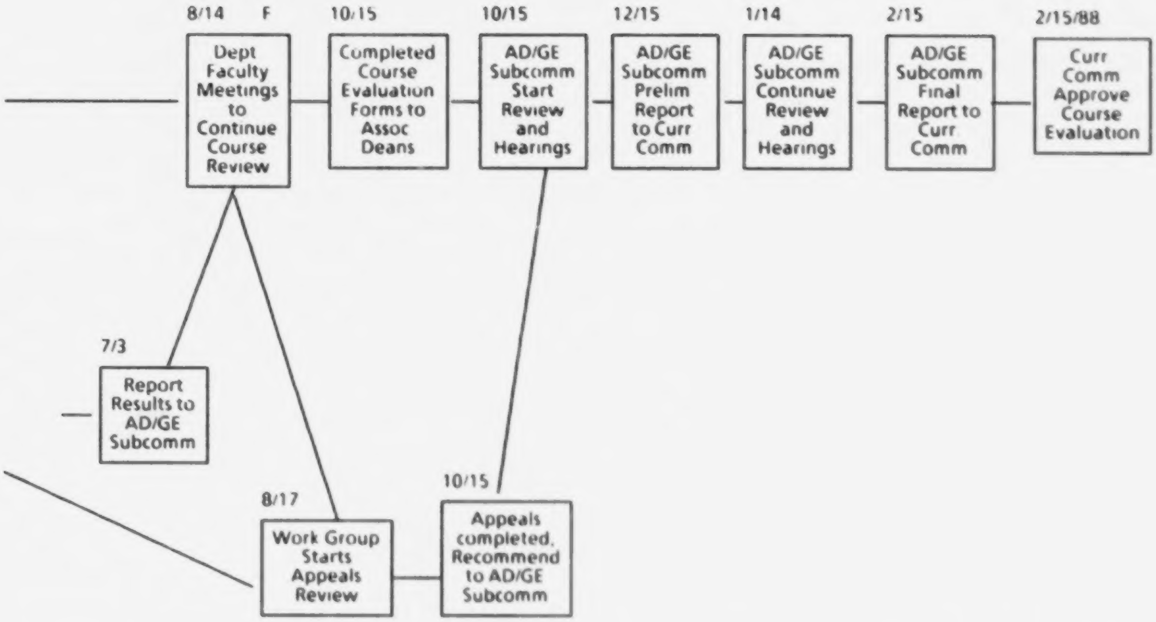
____________/______
DEAN, EXTENDED INSTRUCTION DATE

____________/______
VICE PRESIDENT/ACADEMIC AFFAIRS DATE

For New Courses:
Date of Board Action________
Effective Date________

Long Beach City College
Draft
Title 5 Project Plan
March 15, 1987


3/10/87 A
Draft Project Plan to AD/GE Subcomm
3/18
Curr Comm Approve Project Plan
3/30/87 E
Production Packet to Department Heads
4/2
Dept. Faculty Meetings to Begin Course Review
3/31/87
Critical Thinking Workshop
4/2 C
AD/GE Subcomm Develop Operational Guidelines
4/2
Flow of Curr. Changes to Academic Services
3/24
LAC Open Faculty Meeting
3/18/87 B
AD/GE Subcomm Letter to Faculty
3/26
PCC Open Faculty Meeting
3/31/87 D
Work Group Start Textbook Evaluation
7/3/87
Complete Textbook Reading Level Evaluation
3/31/87
Assoc Deans Provide Sample Materials for Courses Without Textbooks or Manuals


8/14
F
Dept Faculty Meetings to Continue Course Review
10/15
Completed Course Evaluation Forms to Assoc Deans
10/15
AD/GE Subcomm Start Review and Hearings
12/15
AD/GE Subcomm Prelim Report to Curr Comm
1/14
AD/GE Subcomm Continue Review and Hearings
2/15
AD/GE Subcomm Final Report to Curr Comm
2/15/88
Curr Comm Approve Course Evaluation
7/3
Report Results to AD/GE Subcomm
8/17
Work Group Starts Appeals Review
10/15
Appeals completed, Recommend to AD/GE Subcomm

ASSESSMENT

ASSESSMENT

Central to all the discussion on academic standards, educational excellence, and access is the issue of assessment. The range of perspectives on this topic include those that see it as a necessary evil to those that view it as a panacea. Some of the specific questions regarding assessment in community colleges include the following:

- What is the difference between assessment and testing?
- What is the legal definition of assessment bias?
- How do we develop unbiased assessment programs?
- What are the roles of assessment and course pre-requisites?
- How can existing assessment programs be evaluated?
- How can colleges assure compliance with Office of Civil Rights mandates?

In response to requests for supportive information, Chancellery staff have gathered a series of articles and monographs addressing one or more of these issues. For practical reasons, however, it is impossible to include copies of these in this handbook. Instead, we are including a copy of the Colleges Assessment Program Evaluation [CAPE] Self Study Guide for assessment programs. This Guide has been reprinted with permission from the staff of the Office of Academic Affairs of the City University of New York (CUNY) National Project for Colleges Assessment Program Evaluation. The CAPE project is supported by the Fund for the Improvement of Postsecondary Education and the City University of New York.

The Guide is designed to help you arrive at a useful description of your assessment program, by "walking" you through a five-stage process. This document represents the work of well over forty nationwide experts convened by CAPE to address the evaluations of assessment programs. It is included in the Handbook because it is consonant with our process to date -- in which local expertise is recognized. We believe the role of the state Chancellor's staff should be facilitative, rather than directive.

It is recommended that a team of persons having a stake in the assessment process be involved in developing the response to the questions. Once this process has been completed, it is expected that the many questions related to assessment would have been answered in a manner specifically unique to your colleges.

The five areas included in the Guide are:

1. A description of the college.

2. An explanation of the testing program.

3. A description of the relationship between the testing program and the curriculum.

4. An analysis of the strengths of and concerns about the college's basic skills assessment program.

5. Any additional comments.

Each item asks you to describe your college or a major aspect of your assessment program. The general task is followed by a list of specific questions designed to stimulate thought, not to define the limit and content of your response. Some of these questions may not apply to your assessment program; on the other hand, you may want to describe features of your programs not covered by the answers to your questions.

If you have any questions about the Guide or about some of the reference articles mentioned earlier, please contact Dean Rita Cepeda of the Educational Standards and Evaluation Unit, (916) 322-6880. You may also be interested in contacting CAPE directly, at (212) 220-6420.

THE COLLEGE ASSESSMENT PROGRAM EVALUATION
SELF STUDY GUIDE
CAPE

A Project of the Fund for the Improvement
of Postsecondary Education and
the City University of New York

CAPE
The City University of New York
at Bronx Community College
Bronx, NY 10453
(212) 220-6420

This Guide is reprinted with
permission from the CAPE
Project Staff and The
City University of New York

CAPE Self-Study Guide

A. Description of the college. (Use the most recent available data.)

1. Institutional mission and demographics.

   a. What is the mission of your institution?

   b. What institutional data would help visitors understand the context in which your assessment program operates?

      (1) Background, size, and resources of the institution.

      (2) Number and demographic profile of students enrolling at your institution.

2. Academic profile of typical freshman class.

   a. How are students admitted to your institution? If the college follows a selective admissions policy, what are the criteria for admission?

   b. What percent of your freshman class is placed in basic skills courses in writing, reading, mathematics and English-as-a-second-language?

   c. Please provide any other relevant data describing the academic preparation of your freshman class (SAT, ACT, high school average or ranking).

3. Institutional structure and administration.

   a. What data and what personnel are available on your campus for administration and evaluation of the assessment program?

   b. To whom is the assessment program accountable? How formal is this accountability?

   c. Who conducts the actual assessment? If any department uses essay tests, who reads them, how are they scored, and how have readers been trained?

   d. What mechanism exists for student appeals?

e. Has your assessment program ever before been evaluated? If so, by whom? What were the conclusions?

f. What are the physical conditions under which students sit for tests?

g. Do any of your departments help prepare students for testing by informing students in advance of the skills they are expected to possess on entry? Explain.

B. The Testing program.

1. History.

a. Why and how did your assessment program begin?

b. Has it changed over the years? If so, how?

2. Description of placement procedures.

a. What specific instruments do you use to assess the skills of entering freshmen? Indicate specific tests used in writing, reading, mathematics, English as-a-second-language and in any other areas.

b. Are your tests mandatory or optional? Are any of the tests that you use mandated by a university of state system? By anyone else?

c. What is the purpose of each of these tests? Placement? Competency? Proficiency? Other?

d. If placement is based on test results, is it mandatory or optional?

e. How satisfied are you with each of these tests? What evidence do you have or are you seeking that your testing instruments are reliable and valid?

3. Additional uses of tests, if any: Do you give a competency or proficiency exam to permit access from one college year to another or for graduation? Please explain.

4. Assessment instruments for other purposes.

a. Who receives information about student performance on assessment instruments? is any of the assessment information used by policy-makers, faculty from different departments, student advisors, or others?

b. What kind of information do students get about their test results? Do students have the opportunity to review test results with any College representatives?

c. Do feeder high schools or groups from the public sector regularly receive information on student performance on assessment tests? If so, please describe.

C. The Curriculum.

1. Basic skills courses and descriptions: As a result of the initial placement tests, what courses or sequences are required (or suggested) for freshmen? Complete tables 1-4 (pages 7-10) for English, reading, mathematics and English as a Second Language course sequences. Complete table 5 if appropriate.

2. Administration of basic skills courses.

a. What departments offer the different basic skills courses?

b. What is the ratio of full to part-time faculty teaching these courses?

c. What special instruction or training is offered to part-time faculty who teach basic skills courses? Is this assistance mandatory or optional?

d. Do students receive degree-bearing college credit or no credit for these courses?

3. Support services for students in basic skills courses.

a. Do you use assessment results to provide support services outside the classroom? How?

b. Have these support services been evaluated? How? What has this evaluation indicated?

D. Strengths and Concerns.

1. What do you perceive as the strengths of your basic skills assessment program?

2. What are your concerns about your basic skills assessment program?

E. Additional Comments.

CAPE Program Review Project

Description of Program and Uses of Assessment Instrument

Respondent: ____________________

College: ____________________

Phone: ____________________

Program: ____________________

Please Type in Data

Table 1
Writing: Fall 1985

Course Number and Title	Hours[1]	Credits	Placement Criteria		Exit Criteria		Next Writing Course[2]
			Test Scores	Other	Test Scores	Other	

[1] List classroom + other required contact time (e.g., lab, conference) separately (e.g., 3 + 1 lab).

[2] Having passed the course being considered, what is the next writing course the student must enroll in? List all possibilities.

CAPE Program Review Project

Description of Program and Uses of Assessment Instrument

Respondent: ____________________________ College: ________________________

Phone: ________________________________ Program: ________________________

Please Type in Data

Table 2
ESL: Fall 1985

Course Number and Title	Hours[1]	Credits	Placement Criteria		Exit Criteria		Next ESL Course[2]
			Test Scores	Other	Test Scores	Other	

1 List classroom + other required contact time (e.g., lab, conference) separately (e.g., 3 + 1 lab).

2 Having passed the course being considered, what is the next ESL course the student must enroll in? List all possibilities.

CAPE Program Review Project

Description of Program and Uses of Assessment Instrument

Respondent: ____________________ College: ____________________

Phone: ____________________ Program: ____________________

Please Type in Data

Table 3
Reading: Fall 1985

Course Number and Title	Hours[1]	Credits	Placement Criteria		Exit Criteria		Next Reading Course[2]
			Test Scores	Other	Test Scores	Other	

1 List classroom + other required contact time (e.g., lab, conference) separately (e.g., 3 + 1 lab).

2 Having passed the course being considered, what is the next reading course the student must enroll in? List all possibilities.

CAPE Program Review Project

Description of Program and Uses of Assessment Instrument

Respondent: ____________________ College: ____________________

Phone: ____________________ Program: ____________________

Please Type in Data

Table 4
Mathematics: Fall 1985

Course Number and Title	Hours[1]	Credits	Placement Criteria		Exit Criteria		Next Mathematics Course[2]
			Test Scores	Other	Test Scores	Other	

---

1 List classroom + other required contact time (e.g., lab, conference) separately (e.g., 3 + 1 lab).

2 Having passed the course being considered, what is the next mathematics course the student must enroll in? List all possibilities

CAPE Program Review Project

Description of Program and Uses of Assessment Instrument

Respondent: ______________________ College: ______________________

Phone: ______________________ Program: ______________________

Please Type in Data

Table 5
Other: Fall 1985

Course Number and Title	Hours[1]	Credits	Placement Criteria		Exit Criteria		Next ________ Course[2]
			Test Scores	Other	Test Scores	Other	

---

[1] List classroom + other required contact time (e.g., lab, conference) separately (e.g., 3 + 1 lab).

[2] Having passed the course being considered, what is the next ________ course the student must enroll in? List all possibilities

"COLLEGE LEVEL" and "CRITICAL THINKING": PUBLIC POLICY AND EDUCATIONAL REFORM

by

Nancy Clover Glock, Ed.D.*

In 1986, the Board of Governors of the California Community Colleges instituted a policy defining college level and permitting only courses that meet the conditions of this definition to be counted toward the degree. This policy brought to culmination three years of effort from faculty and administrators in California's 106 community colleges to reestablish the credibility of the Associate Degree.

Key phrases in this policy are the "ability to think critically" and "to understand and apply concepts at a level determined by the curriculum committee to be 'college level'"; and "college level learning skills and vocabulary". This essay is an effort to analyze the terms "college level" and "critical thinking", as they relate to this new policy, and to develop some of the practical implications of this analysis for assessment, curriculum, and instruction in community colleges.

"COLLEGE LEVEL"

Important as the term"college level" is in determining what work should be counted toward a college degree, it is not an easy concept to define without circularity. Defining it is less a matter of stating an exhaustive set of criteria, than of stating explicitly what are the relevant factors. Since most subjects can be taught in some form to most ages, content alone is often not a sufficient basis for determining college level, nor is the calculated "grade level" of required texts. Nevertheless, it is possible to discern several factors that are typically used to judge the difficulty or "level" of curricula, as for example when an introductory economics course for high school is distinguished from a course for non-majors in college and both from a course appropriate for majors. Unfortunately, none of these factors, much less how they are to be combined, can be readily reduced to a rule. Weighing them is a matter of judgment, with the clearest cases at the extremes and much room for legitimate debate in the middle.

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On the next two pages, a number of these key factors are summarized (in Table I.) Each of these factors is best viewed as a continuum running from clearly "pre-college" level to clearly "upper division or graduate level." *The point of this table, it is important to note, is not prescriptive but descriptive.* It is meant to describe what we do in fact take into account in determining college level, not to recommend what we ought to take into account--much less what we ought to teach. Not all of these factors are equally appropriate to all college classes, much less necessary to all of them. Nor are these factors limited to college classes. The educational merits of these factors and their appropriateness for different situations must be judged case by case.

In practice, these factors seem to compensate for each other so that a course regarded as "low" in one factor (i.e. towards the pre-collegiate level in one factor) may still be regarded as "college level" if it is "high" in another, as long as it is strong in at least one qualitative area. (That is, quantity of coverage alone is not ordinarily regarded as justifying "college level" if all of the qualitative factors are pre-collegiate.)

CT	**Critical Thinking:** Aspects of a course essential to its cultivation
T	**Transfer:** Essential for courses that are to support upper division or graduate studies (Courses designed for students who intend to complete their higher education at the end of two years do not need to stress these characteristics)

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FACTORS COMMONLY USED TO DETERMINE COLLEGE LEVEL

	SYLLABUS/METHODS	ASSIGNMENTS/TESTS
Intensity * Diversity: *Greater range of different but related topics covered* * Depth: *More complex points made regarding each topic* * Amount: *More new topics covered per class or per course*	College courses in foreign languages cover twice as much per semester; College level history delves into conflicting interpretations.	College homework load is 2-4 times that in high school.
Abstractness *Conceptual: T *Definition of concepts primarily by reference to other concepts or to symbols; tables; formuli (though examples are offered for purposes of illustration). Emphasis upon manipulation of symbols, and concepts.* *Theoretical: T *Emphasis upon concepts and relationships of concepts rather than upon applications; stress upon mastery of a "discipline", with its distinctive concepts, methods, and standards, as well as upon acquisition of the information to be harvested from that discipline. Objective is partly to provide a foundation for further academic work.* *Principles : *While rules of thumb and "recipes" are available, principles are the main focus, thus providing more leverage on the future, more flexibility. Objective is the capacity to adapt to many situations, rather than to prepare intensely for only a few (hence it is "education" not just "training")*	Course outlines may well start with problems and applications intended to suggest the relevance of theory, but will move quickly to a systematic presentation of central principles. Methods and inquiry strategies distinctive to the discipline are explicitly discussed, or alternative practices or problem-solving techniques presented and assessed. Evidence or reasons are offered in support of at least some of the information presented. Criticisms and conflicting viewpoints are discussed. **CT**	Students are asked not only to find out, describe, list and summarize facts and theories, but to compare or assess theories, make their own observations, develop original analyses, syntheses or arguments. In lower division, these activities may be carried out at a very simple level or on elementary material in order to introduce the techniques.In vocational work, students are required to handle difficult situations, or to solve problems requiring selection from among, and intelligent application of, relevant principles. **CT**
Open-endedness *Indeterminateness: CT *Multiplicity of acceptable answers, some more or less "effective" (see "Standards" below), but there is no one correct answer. Or, if only one correct answer is possible, a multiplicity of strategies or solutions for arriving at that answer exists or the one correct strategy cannot be readily determined. Unexpected but acceptable answers or results are possible; generation of new ideas is rewarded.* *Process: CT *Emphasis for instruction and assessment is as much upon the generation and selection of various strategies for completing assignments & tests as it is upon the correctness of the knowledge, the effectiveness of the communications, solutions, products, or performance itself. Trial and error is encouraged; explicit attention to process may be stressed.*	Course outline covers topics but classroom methods allow for emergent possibilities. Plans for classes and assignments are not fully determined. Faculty have wide latitude to respond to new possibililites, while meeting course objectives. Faculty can admit to being "wrong"and are prepared to change their views in response to in-class dialogue.	Work requires judgement by students. Written tests involve essays rather than short answers. Computation, performance, or problem-solving is assessed not only on the final answer but upon the method or strategy used to achieve it . "Hands-on" work is observed in process and the process appraised. Problems posed (in an auto shop class for example) would include some for which the answers were not obvious. Risk-taking is rewarded.

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	SYLLABUS/METHODS	ASSIGNMENTS/TESTS
Rigor *Standards: **CT** *Are shared by, or define, a discipline or state of the art, and faculty and students are accountable to these shared understandings. The "effectiveness' of answers (see "Indeterminateness" above) is judged by reference to these shared standards. (Students have mastered this discipline, or field, or occupation only to the extent that they have mastered these standards.)* *Judgement: **CT** *Since those evaluating work are accountable to these standards, evaluations of work are not merely "subjective", reflecting personal preference, even though they are not objective in the way an "objective" test is intended to be . Professional judgement must be employed in assessing answers or completed work against multiple criteria and/or "globally", as essays or Olympic events are judged.* *Competence: *Grades indicate a level of mastery, rather than effort or improvement.*	Excellent information is available in community service courses or on public television or contemporary K-12 text-books. The difference between these "levels" of education and an appropriately demanding high school or post-secondary course lies in the extent to which the latter requires students not only to "know" such information, but to understand the sources and the significance of that information. Instructors model the methods they expect and elicit insight by the kinds of questions they ask.	Essays, research papers, and other complex products or performances are intended to show one or more o the following: a) Ability to recognize and define problems, or to under-stand or pose good questions b) Knowledge or the ability to obtain the information or resources necessary c) Appreciation of what is at stake, of standards, objectives d) Awareness of at least the obviou alternatives or ability to generate creative solutions e)Decisions or conclusions, based upon a-d, that are at least plausible or defensible.
Independence *Explanation: *Material is presented with relatively little effort to relate it to student experiences, provide concrete examples, spell out step by step instuctions, or lay out options.* *Timeframes: *Work is assigned over longer periods of time with as much as an entire semester passing before anything is required; complex assignments may be made with no information as to how they are to be broken down into manageable tasks* *Coaching: *Monitoring of student effort is slight or non-existent; relatively little time is spent giving answers, assessing student work, analysing solutions, or explaining mistakes.*	Traditionally, the "higher" the course the more students are left on their own to understand what they are being taught, and to complete their own work. Quality of instruction is judged upon the instructor's grasp of the subject and its standards. (Yet, where instructional quality is judged upon "teaching method" as well as know-ledge, and the instructor provides connections, explanations, sugges-tions, and frequent feedback--all aspects of good instruction--the "college level" is not necessarily lowered thereby)	Assignments that require students to define problems for themselves, organize their own tasks, generate strategies and find informationThe ability to work independently not only is a requirement of post-secondary education, but it is an expectation that employers and others have of people who have completed a post-secondary degree. Such independence must therefore be demonstrated successfully at some point before a degree is granted.
Materials *Primary Sources: *Textbooks are supplemented or replaced by works and commentaries not written primarily for students* *Reading Level:*Vocabulary and sentence length make greater demands of the reader as indicated by the calculated "grade level"* *Diversity: *Students are expected to comfortably find and use many sources of information*	Instructing students in effective approaches to difficult material does not compromise the level of the course.	Textbooks do much of the intellectual work for students; courses that require students to do this work for themselves by reading primary sources are "higher" level.

"CRITICAL THINKING"`

The new regulations governing which courses can count toward an associate degree in California do not only require that the course be college level; they also mandate that the course "require the ability to think critically". That is not to say that they require faculty to teach or even to test critical thinking skills as such, but rather that they require faculty to assign work difficult enough to challenge, cultivate, and demonstrate critical thinking skills appropriate to each of the fields for which degree credit is sought.

The purpose of this requirement is to assure the continued credibility of the associate degree. Since it is generally assumed that possession of a college degree, including a two-year degree, attests to the ability of its holder to "think critically" in a number of areas, to graduate students from community college who are unable to do so perpetrates a fraud on both the public and the students. To require as a condition of college graduation that students succeed in coursework that requires critical thinking is, therefore, a matter of integrity.

The new regulations can thus hardly be regarded as unreasonable. At the same time, they could turn out to be highly disruptive. If 'critical thinking' is interpreted too narrowly, the requirement that only courses difficult enough to demand such skills can be counted toward the associate degree could eliminate entire programs and decimate enrollments.

Narrow vs. Broad Definition

Traditionally, 'critical thinking' has been defined narrowly. It has meant something like "evaluating (reasons and conclusions) on the basis of explicit, valid criteria". The roots of this definition trace back to the "forms of thought" first analyzed by Aristotle, then taught as rhetoric and logic in the medieval quadrivium, and today universally required in English composition classes or taught in informal logic classes, usually somewhere supplemented by "scientific method" or inductive reasoning. In this tradition, *"critical"*" thinking is critical in the sense of <u>leveling criticism.</u>

More recently, however, the term has come to be defined broadly enough to encompass not only the leveling of criticism, but also the generating of ideas, the making of decisions, the solving of problems, and the thinking of profound thoughts. And with this broad meaning it has shown up in one after another recommendation for the improvement of education. The meaning of the term has thus gradually stretched to cover essentially all of the areas where "thinking" is at stake in education. Indeed, in this public discourse, the words themselves seen to have been changing, with 'critical', 'thinking', and 'skill' each expanding in its own way. Thus, *"critical"* in at least some recent instances seems to mean "crucial" or "essental", so that 'critical thinking skills' comes not to mean the "thinking skills used to critically evaluate something", but the *"thinking skills that are critical to the accomplishment of something"* . An indication that something like this shift in meaning has occurred is that people who in one context will contrast 'critical thinking' with 'creative thinking', will in another context use the same term, 'critical thinking', to encompass creative thinking. '*Thinking*' has been similarly extended, coming to cover not only verbal thinking, but also visualization, intuition, and action itself. *'Skills'*, finally, has also broadened to include not only the skills *per se* , but also the disposition to use these skills and the values and attitudes that make a truly "critical thinker". (See for example the work of Richard Paul.) Thus when the public demands improvement in "critical thinking skills" it is demanding not only, or even primarily, training in logic, but rather training in those skills of visualization and verbalization critical for success in most endeavors--as well as cultivation of the disposition to use these skills.

Meanwhile in the effort to keep such a key notion from getting entirely out of hand, many theorists have fallen back upon the narrower traditional notion, seeking to clarify the term by reference to concepts drawn essentially from informal logic or from the rhetorical forms. (See for example the recent work of Robert Ennis where the concept of "critical thinking" is related to the broad notion of decision-making, but the actual skills listed are primarily logical and epistemological). Such definitions because they are narrow can be more precisely applied, and because they are traditional can be more readily understood and convincingly defended among educators.

Why a Broad Definition is More Appropriate for Educational Policy

The impetus for incorporating "critical thinking skills" into education is coming as much from the public as from educators themselves. Indeed, it is at the behest of this public that policymakers have required competency in "critical thinking" from students graduating from K-12 and from publicly supported postsecondary institutions. And it is at their behest that such efforts are funded. It is important, therefore, that in carrying out this mandate to teach "critical thinking", educators prepare to teach what the public intended by that term--or at least that they do so insofar as that is feasible and not at odds with the overall goals of education for which educators are ultimately accountable.

What "the public" wants, of course, is hardly a consistent, much less an entirely clear notion. Nonetheless, in reports by business groups and in magazine and newspaper articles, as well as in testimony to legislators, etc., citizens who are urging more "critical thinking" do not seem to have in mind only the ability to comprehend and to analyze textual material, important as that is. Their concern, that is, is not only with the ability to "discern the truth", but also with the ability to "think on one's feet", to "show intiative", and to "solve problems." From their perspective, typists who notice incomprehensible statements in what they are typing and seek out the author to find out what was meant are "thinking critically". The skills at stake for the public are partly nonverbal, as much the hands-on skills of an auto mechanic trying to figure out an unfamiliar problem as the word skills of a debater trying to make a point. Nor is their concern only for ability; it is also for character--for "initiative", "honesty", "accountability", "objectivity", "integrity" and "service". The public has thus been at pains to urge not only the intellectual skills necessary for economic survival in the world of high technology, but the moral qualities as well.

To attempt to meet this public concern with courses in informal logic is to partly misread that concern. That concern is not to impart some new set of skills, however valuable, but to engender more skillful, more alert, more intelligent ways of doing all manner of things. Of course, instruction in informal logic if taught with a view to multiple practical applications and ready transfer might be an effective way to accomplish this end. But still it is not instruction in "critical thinking" or in logic or in English composition, per se, that the public is calling for. What they are seeking is a different approach to most subjects and occupations. Where "critical thinking" is treated as a separate subject, then, it will meet the public's concern only insofar as it strengthens performance in other subjects.

It is a broad view of "critical thinking", therefore, that best reflects the public interest in the matter and thus ought to govern the interpretation of the term when it is written into public policy. Such a broad definition, moreover, would not only meet the concerns of the public, but it would also better accomodate the diverse needs of students who seek success not only in the liberal arts and sciences but also in the arts and vocations.

A broad view has also the virtue of being less elitist since it acknowledges the intellectual significance of what people do who work less with words and more with their hands.

Finally, a broad interpretation of "critical thinking" best accomodates the rapidly developing field of cognitive theory. Without pre-judging which are "higher" or "lower" skills, or assuming that something like formal logic is at the heart of effective decision-making, it remains open to whatever may be found out as to how we actually process information and arrive at sound decisions. A broad definition of "critical thinking", can accommodate the "right-brained", "constructive" or "creative" aspects of thinking as well as the "left-brained". It could thus acknowledge the close partnership between cognitive processes that are intuitive, insight-producing and non-verbal (i.e. in the "context of discovery" where alternatives are generated) and cognitive processes that are critical, sceptical, systematic, analytic and verbally oriented (i.e. in the "context of verification" where alternatives are evaluated.)

On the other hand, a definition that is too broad would be useless. And, certainly, the term "critical thinking" is at risk for such detioration. In the backlash to the back-to-the-basics movement, it has has suffered from its popularity, being the catch-phrase of every recommendation for educational reform. Scholars whose disciplines each have their own brand of "critical thinking" and who have embraced the concept and welcomed the strong public interest have nonetheless expressed sceptici sm, fearing creation of yet another buzz-word, another distracting panacea. Specifically such commentators have suspected that it is only the vagueness of the term that has earned "critical thinking" such universal support by promising effectiveness to everyone but nowhere so clearly that claims on its behalf may be tested and the success--or failure--of efforts to strengthen it conclusively determined.

The question is, then, *can a responsible definition be found that incorporates a view of critical thinking broad enough to account for wide ranging public concerns without simply yielding to vagueness: a definition at once comprehensive and clear.*

Critical Thinking in the Broad Sense: A Programmatic Definition

The most common way to define "critical thinking" is to propose an (exhaustive) list of the skills themselves. As the concept broadens, however, such an approach becomes unworkable. What is needed instead is an explication of the characteristics which any skill, or accomplishment, must have if it is to be an instance of "critical thinking". The following definition is of that kind. It delineates at least some of the charactistics necessary to "critical thinking", especially those characteristics of most relevance for educators. It is what Israel Scheffler (in the Language of Education) has termed a "programmatic definition" in that it does not simply describe how we use the word, but takes into account what the practical implications would be of choosing one definition over another. While it does not purport to exhaust the relevant characteristics of critical thinking that could be specified, the characteristics it does specify have been selected to do justice to the current meanings of the term, while providing primarily for educational policy, instruction, and assessment.

DEFINITION: **"Critical thinking skills" are (a) those diverse cognitive processes and associated attitudes, (b) critical to intelligent action, (c) in diverse situations and fields, (d) that can be improved by instruction or conscious effort.**

Comments

(a) No one "skill" is "critical thinking". The term actually encompasses a diverse set of distinct cognitive processes not all of which are necessary to any given action.

(b) "Intelligent action" is any act of comprehension, communication, or problem-solving that admits of various acceptable solutions or strategies. These solutions or strategies are not usually "right" or "wrong" but are "better" or "worse" as assessed against multiple criteria (such as completeness, coherence, clarity, economy of effort, elegance of proof, or excellence of workmanship). Where only one solution is correct and only one strategy will work (as with a puzzle), solving the problem is an "intelligent action" only if the person must find that strategy on his own.

"Intelligent action" refers not only to verbal and analytical actions but to sequences of kinesthetic actions such as participating in a tennis match or repairing an engine--as long as these actions can be subjected to analysis and the effectiveness of the approach or the strategy assessed. ***Intelligent actions require not only critical thinking skills of the "generic" sort encompassed by the definition, but also the dispositions to use these skills, domain-specific knowledge, and some innate capacities as well.***

(c) These skills are useful in diverse situations and fields in that they are ***equally fundamental to most fields of endeavor.*** *Once learned in one environment, and under the right conditions, they can be transferred into another. They will not, of course, be sufficient for success in the new domain, since specific knowledge of the domain in question is always necessary as well. Instead, in the new environment, they will be applied on a trial and error basis, serving at first only to speed up the learning process in the new domain. Thus if effectively transferred, critical thinking skills substantially decrease the amount of time necessary to become proficient in a new field or endeavor, hence their "generic"--or better--their "generative" quality.*

(d) Critical thinking skills are skills and as such can be improved by instruction and conscious effort, i.e. they are teachable and improvable. As in any endeavor, of course, innate ability also contributes such that there will always remain differences in competence between individuals which cannot be eradicated with even the keenest motivation and the most effective coaching. As neurolinguistic and related research progresses such limits to the feasibility for instruction will no doubt be clarified. Nonetheless, much of the thrust of discovery in this area so far has been to further expand rather than to restrict our notion of what it is possible to teach people. In any

case, it is true by definition that a skill encompasses only those processes which can be taught or which can be improved by teaching and is thus the proper locus of educational policy and effort.

What 'Critical Thinking' Is Not

While the definition proposed here is comprehensive, it is not vague or all-encompassing because there are cognitive processes that do not constitute critical thinking on even the broadest interpretation of that term. Cognitive processes to be "critical" must be teachable and cannot therefore be innate or instinctive processes alone, complex as these may be. "Critical" cognitive processes must also be transferable:

> **...[T]he concept of...a set of learning strategies applicable over a significant range of inquiries, belongs clearly to that of basic skills, enhancing the effectiveness of decisions to learn. Without guaranteeing the capture of new truths at will, [these strategies] increase potential...that is, such [they] increase the agent's capability to learn, strengthening the likelihood of his learning what he indeed sets himself to learn.**
>
> **(p. 89, Of Human Potential by Israel Scheffler)**

Finally, they must be distinctively associated with "intelligent actions." This last requirement means that critical thinking in the full sense is not at stake (or is but minimally involved) in any response required of a student that is fully determined, i.e.for which there is but one or a small set of correct answers and only one way to arrive at this, or these, answer(s). Short answer quizzes, essays that ask respondents "to list" or "to describe" what has already been listed, or described in class, or problem sets where decision procedures are given, applications of given formulae where the terms of the problem are fully laid out, and the following of recipes, instructions, or other skill demonstrations that require execution of a fixed series of motions or rote drills are not "intelligent actions" in the required sense.

(This is not to say that such activities are not without their difficulty or their value, but only that such activities do not involve the critical thinking of contemporary concern in education. Nor, especially, is it to say, as Bloom's Taxonomy has been interpreted as saying, that "describing" is a "lower" activity that does not involve critical thinking. Where the act of description requires original selection and ordering it is as demanding as any intellectual activity, and a good test of the understanding of a theory. It is only where the request for a description is not a request for selection and judgement, as is too often the case in classwork, but a request for what is sometimes disparaged as "regurgitation" that the cognitive activity involved in describing something fails to tap critical thinking.)

On the other hand, actions involving physical skill that are not only habitual but that embody instantaneous decision making, such as some instances of athletics or craft, do call upon critical thinking, at least in the broad sense defined here. The test is whether the series of actions can later be analysed and assessed for strategic or aesthetic effectiveness and improved thereby.

On the definition proposed here, interestingly enough, answers to questions of logic, mathematics, computer programming or Latin--even answers to 'objective" critical thinking tests--that require only the step-by-step application of known rules, and admit of only one correct answer, would not in and of themselves constitute critical thinking, even though the practice of such activities might well cultivate the patience and train the discriminations that critical thinking requires.

> **Basic skills have, in some educational discussions, been contrasted with 'creative thinking'. What sort of contrast might be involved? Consider reading again. The reader may learn something new to himself in reading a library book, but he has not therefore processed the message critically nor has he engaged in creative inquiry--inquiry beyond the application of set rules. Wielding an algorithm in arithmetic is not the same as mathematical problem-solving, which admits of no decision procedure, i.e. a routine guaranteed to yield the solution.**
>
> **(p. 87, Of Human Potential by Israel Scheffler)**

Of course, as when one uses a "truth table" in a logic course, understanding an algorithm or step-by-step process in the first place, appreciating its significance, and--especially--judging when it's appropriate to use that procedure are very much matters of critical thinking.

Setting of "Critical Thinking" Objectives and the Assessment of Competencies

Assessment

To think critically, one must think about something, and to some end. Thus, how effectively someone thinks can only be determined in connection with intelligent actions carried out in some actual situations. To assess someone's ability to thinking critically, then, we must set up situations and analyse that person's response. More specifically we must:

1. Set tasks (or observe events) that call for such intelligent actions as the

Comprehension and appraisal of an argument
Presentation of an explanation, evaluation, definition, or argument (etc.) informally in a discussion or formally in a speech or essay or report
Solving of a mathematics problem or puzzle for which there are no decision procedures, where there are several solution strategies, or one strategy that must be found by trial and error
Development of a design or the giving of a performance in art or sport which calls for ingenuity, analysis and self-assessment
Competition in a match or contest or debate
Management of a complex situation (e.g. a pack-horse trail leader faced with a situation in which the customers in his charge were at risk; a landscaper given conflicting priorities by customers)
Conducting an open-ended interview, managing a group of children, handling an irate customer, resolving conflicting demands for secretarial services

2. Assess the presentation, performance, process, or product as a whole

3. Analyse the components to determine which specific critical thinking skills, attitudes, or domain-specific knowledge contributed successfully to this whole and which need further development.

In considering the assessment of cognitive skills, it may be helpful to consider the assessment of physical skills. In tennis, for example, we consider a player good only if she wins a certain number of matches; in diving, only if his actual dives are typically rated highly by judges. A coach intent upon improving performance does indeed test and analyse the components of the athlete's performance, finds areas in need of improvement, and set practice sessions designed to strengthen that particular skill. Indeed in modern sports, considerable ingenuity and high technology have gone into devising more effective ways of measuring specific skills in order to diagnose various strengths and weaknesses. Yet even so, should an athlete "pass" all of these skills tests with flying colors, she would still not be considered "good" unless she performed well and won often.

Similarly, when the public asks for "critical thinkers", they are not asking for people who test out well on a variety of measures of specific logical or analytical skills. When faculty want students who can think critically they don't mean students who have gotten A's in their "learning skills course". In every case, what they seek are people who can select and use both critical thinking skills along and domain-specific knowledge to successfully carry out various kinds of intelligent actions. It follows, then, that **critical thinking competency can only be assessed in connection with actual applications. Tests of specific critical thinking skills, where valid, can be useful in diagnosing strengths and weaknesses, but not as measures of over-all competency.**

It also follows that even the measurement of specific critical thinking skills is difficult. Objective tests of a particular cognitive skill can be used appropriately to measure an aspect of critical thinking only if open-answer formats are used to supplement the multiple choice answers. These open formats are essential because they permit students to explore and express assumptions, qualifications, misgivings, or other answers not anticipated by the test maker--that is, they permit students to think critically about the test itself!

Setting Objectives:

Given this necessity to assess critical thinking in the context of intelligent action it follows that objectives for courses that are to require critical thinking should not just speak of "demonstrating critical thinking skills" *per se*, or of "problem-solving" *per se*, but should specify the types of intelligent actions that will be required and that will be used as a basis for assessing the ability to think "critically", in context. For example, objectives might require students to generalize, to be able to *"demonstrate how they would handle certain situations", "demonstrate the conduct of open ended interviews in a variety of situations", "compare , explain, and assess the differences between corporate management styles in different countries."*

Inclusion of such clear objectives is essential not only to assure that the course challenges critical thinking as fully as a college level course should, but also to permit students to perceive from the outset a focus for their efforts to learn how to think critically. The relationship between meeting course objectives, learning how to use critical thinking skills, and the earning of a good grade should be spelled out from the beginning.

Requiring Critical Thinking

Impact on Programs : ***College-Level Subjects***

Those charged with actually implementing the new curriculum reforms find themselves immediately up against a difficult question: Does a close relationship between critical thinking and objectives appropriate a given field naturally exist for all subjects? That is, are all subjects equally well-suited to be "college level" as defined by the new regulations or **are some subject matters ruled out at the outset.?** If one defines critical thinking narrowly, treating it as the essentially verbal activity of analyzing and organizing ideas as these relate to argumentation and the assessment of evidence, then the answer must certainly be "yes". Such a definition would seem to rule out some occupational subjects and performance-based subjects. Of course, curriculum planners might tack on activities such as the critical analysis of argumentation to any course, but setting such peripheral requirements would comply only with the letter of the law, not its spirit.

If, on the other hand, 'critical thinking skills' is defined in the broad terms seemingly intended by the public, as has been done in this paper, and if the intelligent actions implicit in most areas of human endeavor are identified and analysed, most subject matters will turn out to have components that are both central to the subject and definitely critical thinking.

Impact on Enrollments;: ***College-Level Students***

The other question that arises in connection with the requirement that only courses that call for critical thinking may count toward the degree is whether they **rule out certain students at the outset.** Under a policy mandating that all college level courses require critical thinking, what happens to the students who lack the skills to do such thinking, at least in connection with college subjects? What happens, that is, to those students who were the object of concern in the first place? Surely, it cannot be the intention of public policies intended to increase the capacity for critical thought to simply screen out those who lack such abilities and withhold a college degree. Rather it must be their intention that such students should learn these skills.

In establishing the new regulations, California has been sensitive to its obligations. It has, to begin with, recognized that the more rigorous standards would preclude success in degree applicable courses for a great many of the students the community colleges have traditionally served. Accordingly, its Board of Governors has accompanied the new regulations with other requirements for the setting of empirically validated pre-requisites, the extensive assessment of student abilities, and the provision of instruction designed specifically to enable students to strengthen these abilities.

But a key question remains: when it comes to strengthening critical thinking skills, what mode of delivering instruction is likely to be the most effective and the most feasible?

If students are to learn critical thinking skills, are they best left to pick them up essentially on their own? Or should they be taught such skills in courses designed exclusively for that purpose and by instructors trained primarily in cognitive processing and in related instructional techniques? Or should they learn them from subject-matter specialists who incorporate critical thinking skills instruction into their regular courses?

Curriculum Planning for Critical Thinking: Content-Based vs. Skill-Based Courses

One of the most insistent of the unresolved questions plaguing those who must find practical ways to implement public policy directing educators to assure that students can think critically is whether to attempt to teach critical thinking skills as part of courses in the standard curriculum or to establish courses especially designed for the purpose.

On the one hand, it is obvious that if critical thinking skills are to be exercised in relation to intelligent acts, they must be learned in conjunction with such acts. It is also obvious that at least some specific critical thinking skills, are so deeply embedded in given subject matters that it is simply not feasible to teach them except in, or in close conjunction with, content-based courses. For example, attempts to teach problem-solving techniques divorced from the problems themselves and from their consequences force them to be taught as games or puzzles and risk their trivialization. Skills learned in a vacuum may transfer poorly and may thus never be applied to the very kinds of situations from which they were abstracted in the first place and for which they are meant to be used. Thus, such specific skills as pattern recognition, estimation and strategies for approaching unfamiliar problems--all essential to mathematics--must be taught in close conjunction with the solving of actual mathematics problems, or else their point is lost. Even though these skills can and should be generalized beyond mathematical application, they must first be grasped in connection with it and then extended to other domain-specific applications, if their full power is to be grasped.

Even subjects traditionally taught separately in skill-based courses, such as writing, may suffer from their isolation. Indeed, the desirability of only teaching these skills in courses devoted exclusively to them has been challenged by the effectiveness of "reading across the curriculum" and "writing across the curriculum" programs. All the more does "critical thinking across the curriculum" seem the right approach, thinking seeming even more inseparable from its products then reading or writing.

At the same time, it is equally obvious that teaching critical thinking skills as such requires techniques--and motivations--that not all teachers primarily trained in subject matter possess. Of course, to those instructors who do possess the interest, technique can be taught. And with techniques in how to incorporate critical thinking skills instruction into content-based courses, some instructors could design courses that would maintain the close relationship between subject matter and thinking skills, while permitting a significant emphasis upon the acquisition of skills. Meanwhile, many instructors would still be loath to make such changes in their courses or in their teaching methods so that to rely exclusively on content-based instructors for the inculcation of critical thinking skills would be to either put undue pressure upon instructors or to risk failing students.

Teaching critical thinking skills also requires considerable time in its own right which is one reason that responsible faculty hesitate to add that responsiblity to the one of imparting content. Even where the skills involved are closely related to the subject matter, it is still true that time must be taken to explain and demonstrate the necessary cognitive skills, to monitor repeated practice at ever-increasing levels of difficulty, to provide frequent and detailed feedback, and to share the results of these efforts.

Upon closer examination, "content-based" vs. "skill-based" turns out to be too simple a dichotomy. When the choice of either mode is made to the exclusion of the other, too much is sacrificed. It matters less which option is chosen than that the curriculum be designed to permit both explicit instruction in the skills and regular exercise of the those skills in practice upon applications in a variety of "real" domains. These conditions are not automatically met in a traditional skill-based course, nor automatically excluded from a content-based one. As long as both conditions are met, on the other hand, the choice of delivery mode can be left simply to what is feasible in a given situation, what instructors are able and willing to do, how schedules and workloads are figured and what students are willing to spend time and money on, etc.

Curriculum Planning for Critical Thinking: Promising Options

A number of promising ways of structuring courses for the teaching critical thinking skills exist or are emerging that permit both specific attention to the particular demands of instruction in a skill and the immediate application of these skills in "intelligent acts" typical of a given field. Among these are:

a) **Regular Content-Based Course:** The content-based instructor not only requires course work that calls for critical thinking but specifically analyzes what students are failing to do when they are unable to meet requirements and provides them instruction and coaching in at least those thinking skills immediatedly needed.

b) **Skill-Oriented Content-Based Course:** Perhaps in an introductory course committed primarily to content, the instructor nonetheless identifies and builds into the syllabus time for explicit instruction (and regular practice and coaching) in those critical thinking skills that will be most essential to success in this and subsequent courses in the field.

c) **Less-Intensive Content-Based Course:** Skill becomes the main objective of the course, content remaining to provide immediate practice as well as substantive learning, but coverage sacrificed wherever necessary (just as, in other courses, skill development is sacrificed as needed to assure content coverage). There is no need to move on until demonstration of the essential competencies is achieved. (Such an approach may mean covering in two semesters what might otherwise be covered in one.)

d) **Skill-Oriented Supplementary Instruction:** Study sections are provided weekly in conjunction with a regular course, sections whose immediate objective is to improve term papers, test scores etc., but whose methods provide for explicit instruction and coaching in critical thinking skills. (See Attachment)

e) **Tandem Courses:** Two courses, one taught by a content-based instructor (e.g. a history teacher) and one by a skill-based instructor (e.g. a writing teacher), are provided to one group of students by teachers who plan their courses to support each others objectives and to assure both skill-oriented assignments (e.g. in history) and content-oriented practice (e.g. in English).

f) **Content-Oriented Skill-Based Course:** The main assignments in a reading or writing or college survival course come from homework assigned in various content-based courses being taken concurrently by the students.

g) **Transfer-Oriented Skill-Based Course:** Courses traditionally thought to strengthen thinking skills (logic, geometry, Latin, English, German, computer-science, science labs) are taught with an explicit effort to identify the generic thinking skills involved and to discuss their possible applications in quite different environments (perhaps with guest speakers).

Teaching Critical Thinking: An Approach that Works

Students who come into a class uncertain of their abilities need first of all to gain confidence. If the course is structured to identify and take advantage of the critical thinking skills they already possss and then to build upon that with steps small enough that success is likely each time, and if the course does not move faster than most students are able to stay with it, confidence grows. With confidence comes courage.

One way to shift the focus of students onto process and to introduce the notion of critical thinking skills while starting students off with greater confidence, is to give them the opportunity to do something they already know how to do. An instructor could, for example, invite students to discuss the purchase of a car or to compare rock and roll groups or to organize a shopping list or to choose someone they would want to have as a boss. During the class discussion, the instructor could analyse what they are doing and show students the critical thinking skills they already possess and use every day. The instructor could then show how these newly identified skills could be applied to assignments in the course.

Thereafter, when the instructor gives an assignment, he could walk through an example, explicitly describing the kinds of critical thinking skills that are appropriate, trying out and assessing various problem-solving strategies and encouraging suggestions from students. Students might then first attempt to do such assignments in groups, talking out their thinking as they go and calling on the instructor with questions as needed. (They might be encouraged to offer the instructor not only questions but their best guess as to an approach whenever they call for help).

Then when students bring their assignments back to class, they could once again work in small groups to analyse what was done and why, with an effort to identify promising strategies--even where the final result doesn't fully work out.

Students working in groups and eventually on their own should **devise problems and questions for other groups and each other. The better problems and questions should be identified by the students under the instructors guidance and the reasons why they are better discussed and then turned into general principles.** Eventually such student-generated material should provide the basis for actual examinations.

It has often been the experience of instructors who use such techniques that *what is lost in coverage is gained in leverage*. Thus the very slow progress at the beginning of a course is made up for in the end as students begin to move ahead quickly (that is, just at the point when courses taught the usual way often bog down as students earlier uncertainties catch up with them.)

Teaching Critical Thinking: Conditions of Success

Stress on Process:

The most distinctive thing about teaching critical thinking skills is that it involves at least a partial shift in the focus of the course from content to an on-going concern with process, or to what has been termed "meta-cognition". And process involves not only skill, but also self-tolerance, courage and persistence. Instruction in such things benefits from specific information regarding how the brain works, tied in with explicit discussion of the process the instructor, students, and experts go through to accomplish objectives in given fields. It also benefits from frequent acknowledgement of the difficulty of what is being attempted and of the feelings of uncertainty, frustration, stupidity, fear, elation, relief, etc that normally accompany such efforts.

Coaching Techniques

Beyond the specification of objectives and the concern with process which can be incorporated into any course without undue sacrifice of time, there are also specific techniques essential to the coaching of a skill that obviously do take time. These coaching techniques supportive of the development of critical thinking skills include:

a) **Identification and sequencing of skills**: Complex competencies should be broken down into identifiable skills, carefully sequenced in level of difficulty. It is important that the initial work, the terminology used to explain it, and the feedback given to it not be intimidating. Frequent, early success builds the courage needed for later difficulties.

b) **Modeling the proper exercise of such skills:** Students need to actually see people struggling with ideas as when an instructor talks out an analysis, using a chalk board, or when other students, in problem-solving pairs, explain their approaches to solving problems. They also need to see correctly finished products, e.g. blue-book exams or term-papers with analysis and comment.

c) **Incorporation of skills emphasis in regular assignments:** It is not enough simply to show students effective techniques on a take-it or leave-it basis. The focus of their work in the class must become partly one of tackling the difficult and sometimes frightening on a regular basis. Some assignments should be designed specifically to increase critical thinking skills, with feedback focussed not just upon the outcomes, put upon the skills and strategies which contributed to those outcomes.

d) **Closely monitored practice**: Someone needs to go over what students have done and help them identify strengths and weaknesses and talk out the process whereby they completed the work; fellow-students, instructional aides or tutors, or the instructor can do this. This extra help is the most expensive, yet one of the most crucial, parts of any effort to strengthen critical thinking skills; without it, the effort is sorely handicapped. Supplementary instruction is a way to achieve this close monitoring without sacrificing course coverage or instructional time. (See attached article, "Breaking the Attrition Cycle")

d) **Use of skills in a situation calling for intelligent action:** The skills should be applied as quickly as possible to tasks that students recognize as "real" such as taking an examination in a content-based course.

e) **Analysis of how well the necessary skills were employed:** Formal assessment of students progress in their use of the skills should be accomplished primarily be analyzing the process they have gone through in employing these skills in "real" situations.

Planning for Transfer

Transfer must not be left to chance. Wherever critical thinking skills are taught, whether in a skill-based or content-based course, an explicit effort should be made to facilitate the transfer of these skills. This effort is so essential because many students, lacking experience and self-confidence, will not readily make such transfers on their own. Yet without such transfers the generality of critical thinking skills and the great power they provide for handling a lifetime of new sitations is lost.

Transfer is facilitated partly just by telling students that it is possible, and offering a few examples, so that they expect and start looking for opportunities that present themselves in other courses, etc. A more extended version of this idea would be to have guest lecturers from other content-areas. For example, *a geology instructor who had been teaching the research methods peculiar to historical geology might invite in a history teacher or a linguistics teacher to explore the similarities and differences in the methodologies of their respective fields*. A key point in the ensuing discussion should be the universality of the value of systematic gathering and sifting of evidence, regardless of the field. The geology teacher might accompany this guest lecture, or follow it up, with one from an occupational specialist--say an automobile repair instructor--who could explain how the same patient, systematic mind-set useful in solving a problem in geology is also necessary for isolating an electrical problem in a car.

Committment

Teaching critical thinking skills and facilitating their transfer is part of the educational effort public concern is calling for. But if the effort stops there, the whole point is missed. For once again it is not skill alone that the public wants; it is the exercise of that skill, wherever appropriate. And the exercise of critical thinking is as much a matter of disposition as of skill. It is a matter of courage in the face of uncertainty, of persistence in the midst of difficulty, of patience in the face of complexity. And it is, above all, the willingess--when truth is importantly at stake--to sacrifice security, efficiency, (and sometimes even loyalty) in its service.

Obvious as this point is, once made, it is in danger of proving a mere platitude if its implications are not closely examined. At its root, insistence upon critical thinking in the fullest sense is insistence upon jeopardy for student and teacher alike.

> **"Critical thinking is reflexive. It is not reasoning from A to B; it is reasoning about "Why A?" and "Why B?" The reflexive character of critical thinking places unusual demands on teachers who would teach critical thinking....People tend to be wary of critical thinking and made uncomfortable by it. The critical thinker may choose, on reflection, not to solve the math problem, may even choose not to teach it!**
>
> **(Unpublished Manuscript, "Teaching Critical Thinking"by Beatrice K. Nelson)**

> **Our native tongue appears to us at the beinning as a purely transparent window on the real world. Ony later on, in encountering other tongues and other usages do we come to a more reflective self-consciousness about our own symbolic representations. Extended further, such self-consciousness turns sytematically critical, forcing a theoretical wedge between ourselves and our own representations...we thus acquire a reflective distance...**
>
> **(p. 20, Of Human Potential, by Israel Scheffler)**

If it is to be authentic, the requirement for "critical thinking" in a course cannot only affect the objectives of the course, its content, texts, assignments, and evaluation modes. It must also, most importantly, affect the style and methods of instruction and the atmosphere of the class. Care in reasoning matters little if the products of reasoning are not taken seriously in the class; if problems are set only as exercises. And if care is taught only in connection with exercises and never in connection with real beliefs, deeply felt, then the likelihood of the transfer of critical thinking skills to any context where they really matter is greatly reduced. On the other hand, if the critical thinking going on in a classroom is to be authentic, then it means that the statements of the teacher and of the text, and the assumptions and values inherent in the discipline or field under study must all be open to scrutiny, should question arise. It may also mean that the teacher should explicitly and consciously raise such fundamental questions and be prepared to seriously entertain any resulting challenges.

Nor must this questioning in its turn be permitted to become but an empty exercise. The object is not the production of knee-jerk scepticism. Questioning is only part of critical thinking. Understanding and being able to assess evidence, knowing when to act on partial evidence, and recognizing where values or fundamental principles must simply be accepted as starting points are also crucial aspects of the full exercise of critical thinking. In the end, the educational objective is for students to arrive at better answers--not to refuse answers at all. It is for them to take more responsibility for the answers they accept--not to avoid taking stands at all.

> **Desire here blossoms into committment, perseverance, loyalty--a kind of love of the project embarked on, with which one identifies oneself and which helps shape one's self-respect. Beyond realistic hope, not always available, lies faith; and love of the goal may inspire the courage to conquer even realistic fears. It is not only in the realm of moral principle, thus, that fear and love, courage and respect, have a role to play, but throughout the sphere of action their relevance is evident. Hedged about by constraints on available options, by limitations of capability, and by the uncertainty of even the best-available foresight, human choice proceeds nevertheless to stake out paths in the jungle of possibilities, building habitations of varied structure and adornment to house its loves and works.**
>
> **(p. 33, Of Human Potential, Israel Scheffler)**

CHART: CRITICAL THINKING SKILLS

On the next page is a chart showing the five main components of intelligent action and attempting to distinguish which aspects of each of these components is generic and transferable, hence a "critical thinking skill", which are are attitudes, and which are domain-specific (i.e. skills or knowledge or attitudes specific to a given domain or field of human endeavor and hence dependent upon specific experience with that field). **It may be useful in defining objectives for a course or in designing situations that test these abilities.**

On the two pages following is a double-chart organizing intelligent actions in the order of difficulty. Moving from top to bottom, it becomes more difficult to explain to students what is required and more threatening to students to carry them out. For the most part, those actions called for toward the bottom of the page presuppose the ability to do those occurring earlier on the page.

The two sides of the double-chart attempt to show the roughly parallel development in hands-on and/or technical tasks, on the one hand, and the more academic, verbal tasks on the other. **These charts may be useful in identifying and sequencing content-based tasks that call for critical thinking skills at increasing levels of difficulty.** While transfer horizontally across these two classes of activities, on the double chart, even at the same level, rarely occurs spontaneously, there is some evidence that explicit efforts to bring about such transfers can reap marked benefits to students.

One such effort to encourage transfer of critical thinking skills across the split between "verbal" and "visual" follow the chart. is an effort to use the visualizing, graphing techniques typical of "problem-solving" to carry out the essentially verbal task of writing an answer to an essay examination

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SOME THINKING SKILLS CRITICAL TO COMPREHENSION, COMMUNICATION, & PROBLEM-SOLVING

Components of Intelligent Acts	Generic Thinking Skills	Attitudes Critical to Thinking	Domain-Specific Thinking Skills
1. PROBLEM-POSING Perceiving and defining a problem (or potential); Asking a fruitful question Defining an effective theme	*Understanding what a problem or a theme is, in general, and having some schemata or search strategies for anticipating or discerning problems or developing a theme *Ability to sift through multiple variables and "put one's finger on the real problem" or the "real point" *Ability to shift perspective, to re-define problem or theme from different perspectives *Ability to articulate a problem or theme in different terms	*Initiative *Habit of "scanning", of looking out for problems or significance *Both caution and confidence in setting aside other variables or themes to focus on the one more promising *Tolerance for "cognitive dissonance" and uncertainty *Recognition that problems must often be redefined, or ideas reworked, before a solution or a structure can be found *Overriding desire to find the best solution or structure	*Knowledge of the types of problems or issues constitutive of this discipline or familiarity with the types of problems that typically show up in this field or situation. *Understanding of the vocabulary peculiar to this field and of the range of terminology that can be used to define problems or state ideas that will be comprehensible to others in the field *Experience with successfully reformulating problems/ideas in the past; familiarity with the different viewpoints in the field
2. INQUIRY Determining what information is necessary and obtaining it	*Understanding when its necessary to ask each of the following questions *Ability to evaluate the distinct kinds of evidence for each: *a. What do you mean?* *b. How do you know?* *c. So What?*	*Disposition to seek answers before acting and to check the validity of crucial information where it may be suspect *Willingess to take responsibility for the truth of one's claims *Honesty	*Understanding of the modes of inquiry constitutive of a discipline or of the techniques for finding out used in a field *Skill in following these modes or using these techniques
3. STANDARDS Understanding what is at stake in the situation, what are the objectives, or the standards of the endeavor	*Understanding standards of relevance, clarity, evidence, logical validity, coherence, proportion, economy, utility, fairness *Understanding of when and how these standards apply *Techniques for testing when these standards have been met	*Appreciation of what it means to meet standards *Willingness to subject one's ideas or efforts to critical scrutiny and to modify them in light of what is found out, in order to meet standards of truth, justice, caring, beauty, effectiveness and efficiency	*Understanding of the standards constitutive of a discipline, or the objectives constitutive of a field *Experience applying these standards to actual situations; *Judgement regarding the relative importance of standards and when they may be safely set aside
4. CREATIVE THINKING Generating alternatives	*Ability to "break a mind-set" *Familiarity with strategies and schemata that could be varied to fit new situations *Brainstorming & insight-generating techniques	*Tolerance for uncertainty *Playfulness *Courage *Patience and persistence *Understanding and respect for one's own creative processes *Capacity to work with others	*Familiarity with all of the usual alternatives available in the field *Experience solving a wide array of problems and generating additional alternatives when the usual ones wouldn't work
5. REASONING Accepting a conclusion; making a plausible decision for sound reasons Assessing one's own work correctly	*Intelligent acts require general cognitive skills, the disposition to use these skills, and knowledge peculiar to a given domain.* ***"Critical thinking" can be viewed as covering all of these general cognitive skills or as limited to a special sub-set (the evaluative).*** *The ability of someone to "think critically" is not just the sum of these skills but how they are applied* *Assessment of critical thinking skills must be based upon a careful analysis of how they were used, with the relevant "domain-specific" knowledge, in such actual applications:as grades in content-based courses or on-the-job effectiveness.*		

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Tasks Calling for Critical Thinking Skills

EXPOSITION

Primarily verbal skills essential to success in the liberal arts, professions, management, public policy, and the making of complex personal decisions

	Levels of Teaching	Methods of Teaching and Assessing	Examples of Assignments
Not Critical Thinking	**Answering Questions** Answering "what", "when", "where", "who" and "how" questions; giving definitions; listing, summarizing or describing information from the course; completing a form on the job.	Go over the test and notes from your own lectures in class, asking aloud and getting answers to the question: "What question is answered here?" The accuracy and types of questions asked in response is an indicator of comprehension.	Have students look at their notes or texts and generate their own questions by asking themselves "To what question is this passage an answer?" Initally they will typically produce primarily informational questions.
Critical Thinking	Using information presented in the course, or data already available on the job, to appropriately answer questions posed regarding "Why" or questions that require analysis, synthesis, comparison, evaluation, or justification	When a student generates a "why" question, take particular note and get students discussing what questions are the most powerful and why. Explain the structure of analytical questions using familiar material (and visualizations. See following pages for some examples.)	In quizzes, use student-generated questions and pose analytical questions,explaining ahead of time how answers to such questions can be structured. (Requiring them to use visual analogues for each of the usual essay questions are helpful. (See examples on back of next page)
	Asking Questions Obtaining and then analysing, comparing evaluating, synthesizing information and ideas not presented in the course or already available on the job. Material from other classes can be used ito let students experience the transferability of thinking skills.	Once students have become comfortable working with more powerful questions and answering them from material already available in the class, similar questions can be posed that require finding additional material on one's own using techniques explained in class.	Use of structures (see next chart) will generate many questions that go beyond the material. Set-breaking exercises (see DeBono) brainstorming techniques and other "creative thinking" exercises can be combined with self-criticism techniques (See below) for specific assignments
	Questioning Answers Critically assessing the material in the course, or material generated by oneself. (This should be taught partly to engender a healthy scepticism, but primarily as the parallel process to creativity: insight vs. verification, "right-brain" vs. "left-brain"; global vs.linear; intuition vs. analysis)	Material presented in the text can be analyzed to determine which of the inquiry techniques (presented above) generated it. Instructor may criticize the text and may carefully go over the criticisms to point out relevant criteria. *Above all, the instructor must subject his own views to scrutiny and be willing to modify them publicly during a discussion.*	Students may be asked to read criticisms of their text or readings that conflict with it. After criticism has been modelled and analyzed by the instructor, or generated in class discussions, students could attempt their own carefully argued criticism, based where possible upon their own experience. *This kind of learning is threatening and is best internalized in a supportive class*
	Questioning Questions Rethinking the frame of reference, the underlying assumptions in the material taught, with an emphasis on conceptual, normative, and theoretical analysis	Comparisons of divergent views or theoretical anomolies may be presented, then discussed, with the instructor actively posing questions that lead students to perceive that the differences in viewpoint stem from differences in terminology or even in the questions being answered. Instructor may model reformulating a problem and then explain that process.	To criticize ones own work or to have a frame of reference questioned or shifted is disturbing and is thus often resisted. Important but not intractable emotion-laden topics are best assigned initially until the realization of the universality of reinterpretation and redefinition begins to dawn, when more threatening topics might be attempt-ed. (In short, debating "abortion" is NOT the place to start)

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Tasks Calling for Critical Thinking Skills

PROBLEM SOLVING

Primarily spatial, reasoning, and quantitative skills essential to the performing and other arts and to householding, various occupations, technical fields, research and management.

Level to be Emphasized in Teaching	Methods of Teaching and Assessing	Examples of Assignments	
Solving Problems Posed Solving problems posed by others using a given formula or a step by step procedure (including word problems with procedure given)	Consider not using a textbook, at least initially, and having students take complete notes with full written explanations, diagrams and charts they draw themselves, and their own marginal comments.	Have students make up their own problems and solve them, or each others. Have them first read the problem sets in their texts to see what they understand or can guess-- then read the text to see if they are right!	*Not Critical Thinking*
Solving problems set by others by first formulating the problem more precisely and then selecting from among solutions of proven effectiveness (including puzzles and word problems other than above)	Have students set word problems or problem situations for you and model solving them, slowly talking out possible approaches, and thinking aloud about why you reject some approaches and pursue others.	Have students work in pairs and talk aloud their approach to solving problems, stopping each other when a step is skipped or wrong; have them use pictures and/or write out their thinking (see attached & Whimbey).	*Critical Thinking*
Posing Problems On the basis of experience and understanding of a given set of objectives, standards, etc., perceiving or anticipating problems (or potentials), defining and acting to solve the problem (or realize the potential) by known solutions, or by trial and error.	Analyse cases in class. Observe students solving problems or carrying out complex processes, in hands-on situations, and later have them analyse what they did and why. From these analyses, illustrate principles and draw out rules of thumb appropriate to the field.	Have them observe and evaluate situations, act, and analyze their own actions. Have them write up "lessons learned" from experience (as some companies reward employees for doing).	
Posing New Solutions Generating new ideas, approaches, solutions, or techniques; making new uses or new combinations of old ideas; risking solutions of unknown value.	Specifically explain and practice brainstorming and other "right-brained" or "creative thinking" techniques intended to help students break through a mindset. Encourage "meta-cognition", i.e. watching how one's own cognitive processes work and learning to work with them and to appreciate the wide diversity of effective styles of problem solving. Teach techniques for cooperative problem-solving.	Require students to deal with situations novel enough that the solutions they are accustomed to using won't work reliably thus forcing joint efforts, risk-taking and persistence. Require them to explicitly try out techniques taught and to discuss, and possibly record, the processes they went through and to share such records with other students looking for ideas.	
Redefining Problems Recognizing when the way the problem is posed is getting in the way of a solution, or is not the "real" problem. Redefining what counts as a solution or the very terms in which the problem is described.	Same as above. Also provide historical and other examples of cases where viewing the problems differently was the first step to solving them. Model formulating the "problem" in many different ways. When explaining different theories, show how each would view the same problem differently and what would be gained thereby.	Require students to take the same "problem" and define it in several different ways, perhaps in each of the ways suggested by different theories discussed in class. Reward risk; i.e. reward students for redefining the problem even when they sometimes are less effective because of having tried to apply something new learned in class or to have done something more difficult.	

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T-Formations

Comparison/Contrast

Typical Essay Question:
"Explain the similarities and differences betweencontemporary Britain and America"

England	*America*
Same language	
Parliament	*Congress*
Royal family	*No inherited offices*
Import most food	*Grow most food*
Both democracies	
Both world powers	
Both industrialized	
Etc.	

Pro/Con

Typical Essay Question:
"Discuss the issue of immigration"

Limiting Immigration: +	-
Preserves jobs for Americans	*Keeps cost of labor artificially high*
Makes it possible to serve the needy already here	*Keeps out the needy and the endangered*
Country can only hold so many	*Almost all Americans were once foreigners*
Family members get priority	*Separates families*
Etc.	

Comparison Grids

Typical Essay Question:
"Discuss the Italian, French, and English Renaissance"

	Italy	*France*	*England*
Dates?			
Center(s)?			
Political Leaders?			
Key Events?			
Key Discoveries?			
Scientists/Inventors?			
Writers?			
Artists?			
Art Works?			
Philosophers?			

If you were setting a question like this for yourself ahead of time while studying for your exam, you could make up the list of topics (left hand column) from your comments in the margins of your class notes and the sub-headings in your textbooks. Answers in the boxes could be page numbers or lecture dates. (Avoid questions that would have a simple yes or no in the boxes)

"EXAMINATION VERBS" FOR ESSAY TESTS

VERB	POSSIBLE FORMS
DESCRIBE: What? When? Where? Who?	LIST PICTURE DIAGRAM
DEFINE:	VENN DIAGRAM TREE
GIVE AN EXAMPLE OF	PICTURE
LIST, CLASSIFY	LIST TREE
COMPARE/CONTRAST	"T" FORMATION (C/C) C/C GRID
EXPLAIN THE RELATIONSHIP BETWEEN ANALYZE	
1. List key factors	
2. Determine if relationship is:	OUTLINE
Categorical (including Argumentation)	VENN DIAGRAMS
Sequential	TREE
Process	FLOW CHART
Chronological	DATE LINE
Causal	CAUSAL ARROW
Spatial	
3. Choose appropriate form	
TRACE THE DEVELOPMENT OF, SHOW WHY, WHY?, EXPLAIN THE CAUSES OF, GIVE REASONS WHY SUCH &SSUCH HAPPENED	CAUSAL ARROW SYSTEMS FLOW
EXPLAIN THE PROCESS OF (HOW TO, ETC.)	FLOW CHART CYCLE LIST STEPS
EXPLAIN THE REASONS FOR, JUSTIFY, SHOW THAT, PROVE,etc.	"T"FORMATION (+/-) VENN DIAGRAMS DEFINITIONS LIST OF REASONS LIST OF TOPICS
EVALUATE, CRITICIZE, INTERPRET	

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Curriculum Resource Paper 2

ASSESSING COLLEGE-LEVEL MATERIALS

This resource information has been prepared for use in development of course outlines at Solano Community Colleges. Copies may be obtained in the Curriculum Office.

Assessing College Level Materials
Annette Runquist
January 1987

Title V regulations specify the need for instructors to verify that reading materials used in the classroom are "college level." While there is not one instrument that can objectively measure the "reading level" of our college materials, the following resources should prove useful when evaluating your classroom eading assignments:

I. Facts and Fallacies Concerning Readability by Annette Runquist (ATTACHED)
This simple handout is a product of my own research regarding READABILITY. Keep in mind that while readability formulas may yield a variety of results (grade level measures), recent court cases have honored the use of reliable formulae to measure the readability of legal documents such as welfare forms, contractual agreements, etc.

II. Fry Readability formula and graph (ATTACHED)
Developed by Edward Fry, Rutgers University; uses total number of syllables and average sentence length

III. Raygor Readability Estimate (ATTACHED)
Developed by Alton Raygor, University of Minnesota; uses number of words with 6 or more letters and average sentence length (Correlates .875 w/Fry)

IV. Rix Rate readability formula (LEARNING CENTER) - SOFTWARE
Developed by Jonathan Anderson, Flinders University of South Australia; based on Swedish formula Lasbarhetsindex or Lix); uses number of words with 7 or more letters and average sentence length

V. RightWriter (LEARNING CENTER) - SOFTWARE
Based on the Flesch-Kincaid readability formula, this software program attempts to measure readability, including a variety of factors (word length, sentence length, semantic variables). If you choose to use this program, please use an additional readability formula to measure reading level. Average the two formulae. (As far as I can tell, the documentation on RightWriter is not very comprehensive).

After assessing the READABILITY of your textbooks, ask yourself what you consider to be "college level" materials. Also, remember that there is a marked difference between a student's INSTRUCTIONAL reading ability (guided by instructor...70% comprehension) and a student's INDEPENDENT reading ability (Not guided by instructor, e.g. homework...90% comprehension).

If I can be of further assistance, contact me (x294 office or x465 dept.)/ ...and remember, if your students need to improve their ability to read, enroll them in our open/entry-open/exit Reading Improvement Lab (Engl. 320)!

I. FACTS AND FALLACIES CONCERNING READABILITY

1.) What is readability?

Readability formulas are an estimate of the reading difficulty of any reading material.

There are many readability Formulas. Most formulas are based on correlational data, i.e. number of words in a sentence, number of syllables in a word or word-count length,** and the percentage of unfamiliar words in any reading passage (derived from researched word lists). By averaging several passages in a text (using a readability formula), a readability score will yield a grade level equivalency score. This readability measure represents an average of the readability (linguistic variables) of the entire reading text. Keep in mind that different formulas yield different grade equivalency scores.

2.) Of what practical use are readability formulas?

Readability formulas provide an ESTIMATE of reading difficulty.

An adequate sampling of the text must be tested, if readability formulas are to be considered objective. In general, one should test a minimum of 3-6 100 word passages from the beginning, middle, and end of the text.

Readability formulas are only one measure of the actual readability of a text. Although sentence length and word length in particular do have some correlation with passage reading difficulty, these factors are not necessarily the cause of reading difficulty. Research has shown that word or semantic variable is the most reliable readability factor in a readability formula score.

3.) What factors, other than readability, should one examine when evaluating textbooks?

In 1935, 2 researchers (Grave and Leary) identified as many as 288 characteristics affecting readability. In general, they categorized these factors into 4 categories:

- a.) Format
- b.) General features of organization
- c.) Content
- d.) Style of expression and presentation

An examination of many of the characteristics that impact or enhance readability usually results in a common-sense approach to critically examining a text in its entirety. Relying solely on word count and sentence length to obtain a readability score, ignores the specificity and beauty of the English language.

RECOMMENDATIONS

THE DESIGN OF YOUR TEXTBOOK IS CRITICAL:

Consider:
- typeface (style; size)
- long-winded paragraph structure
- lengthy sentence structure
- confusing punctuation
- full pages of type (eye strain)
- illustrations, charts, graphs, photographs
- chapter summaries
- study questions
- glossary and bibliography, as needed
- sub-heads and bold face type
- use of color

READABILITY FORMULAS DO NOT MEASURE:

- scrambled text as compared to well-ordered prose
- concept density
- level of abstraction
- appropriate organization, coherence, and logical presentation of ideas (clear writing style)
- figurative and poetic language
- multiple meanings
- technical/scientific vocabulary (any content specific vocabulary)
- reader INTEREST AND/OR MOTIVATION

Be cautious of textbooks written to "formula." Assist your students to read and understand the best textbooks in your field; remember to ask your students for an evaluation of the text.

THE GOAL OF READABILITY FORMULAS IS TO MATCH THE READER TO THE TEXT.

II. THE FRY READABILITY GRAPH

Directions

1. Select three one-hundred word passages, from near the beginning, middle and end of the book. Skip all proper nouns.

2. Count the total number of sentences in each hundred-word passage (estimating to nearest tenth of a sentence.) Avarage these three numbers.

3. Count the total number of syllables in each undred-word sample. I find it convenient to count every syllable over one in each word and add 100, average the total number of syllables for the three samples.

4. Plot on the graph the average number of sentences per hundred words and the average number of syllables per hundred words. Most plot points fall near the heavy curved line. Perpendicular lines mark off approximate grade level areas.

EXAMPLE

	Sentences per 100 words	Syllables per 100 words
100-word sample Page 5	9.1	122
100-word sample Page 89	8.5	140
100-word sample Page 160	7.0	129
	3) 24.6	3) 391
	)	)
	8.2	130

Plotting these samples and the average on the graph, we find that the average falls in the 5th grade area; hence the book is about 5th grade difficulty level. If great variability is encountered either in sentence length or in the syllable count for the three selections, then randomly select several more passages and average them in before plotting.

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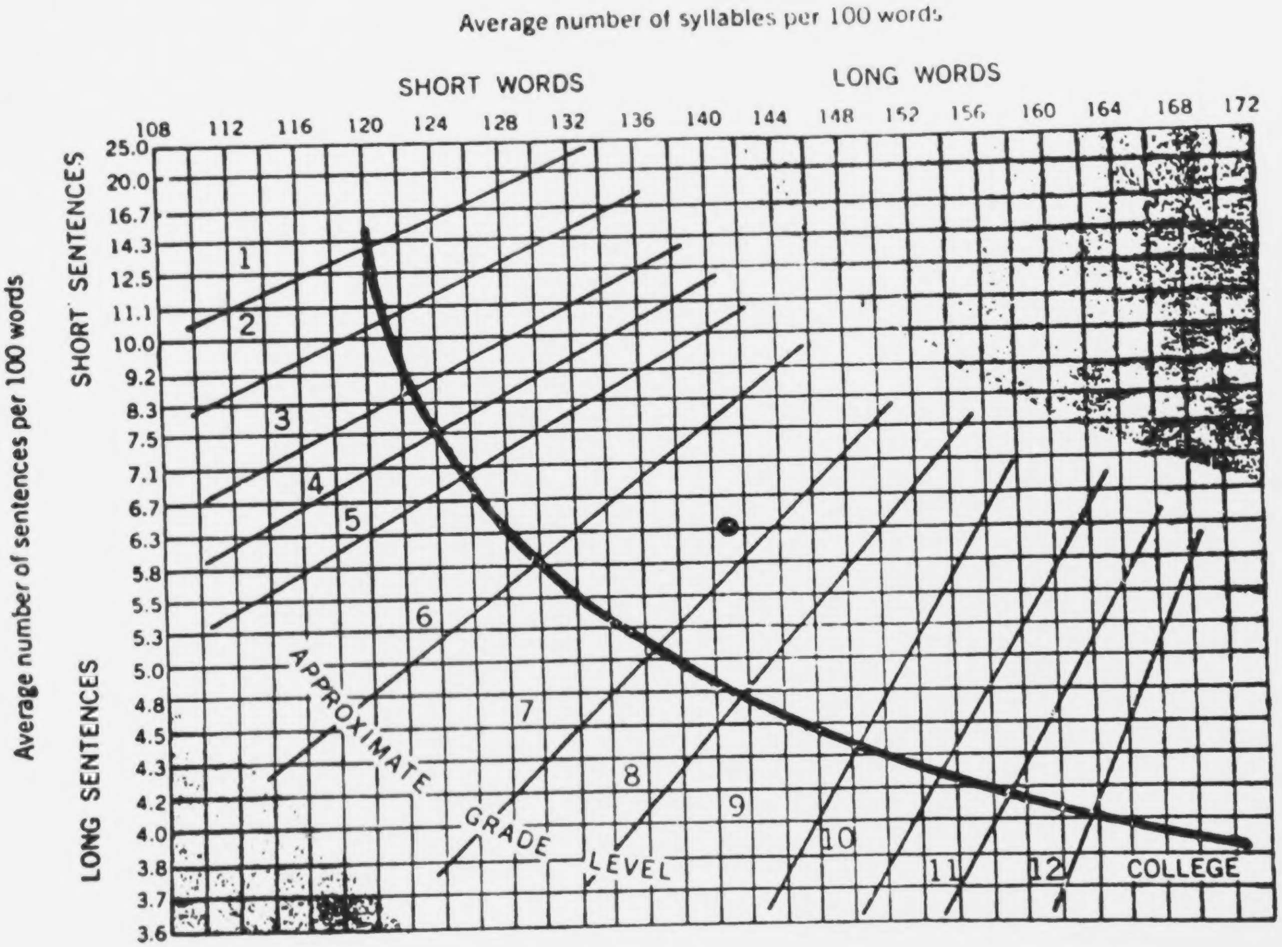
Sources: Journal of Reading, April 1968
Reading Teacher, March 1969



Directions: Randomly select 3 one hundred word passages from a book or an article. Plot average number of syllables and average number of sentences per 100 words on graph to determine the grade level of the material. Choose more passages per book if great variability is observed and conclude that the book has uneven readability. Few books will fall in gray area, but when they do, grade level scores are invalid.

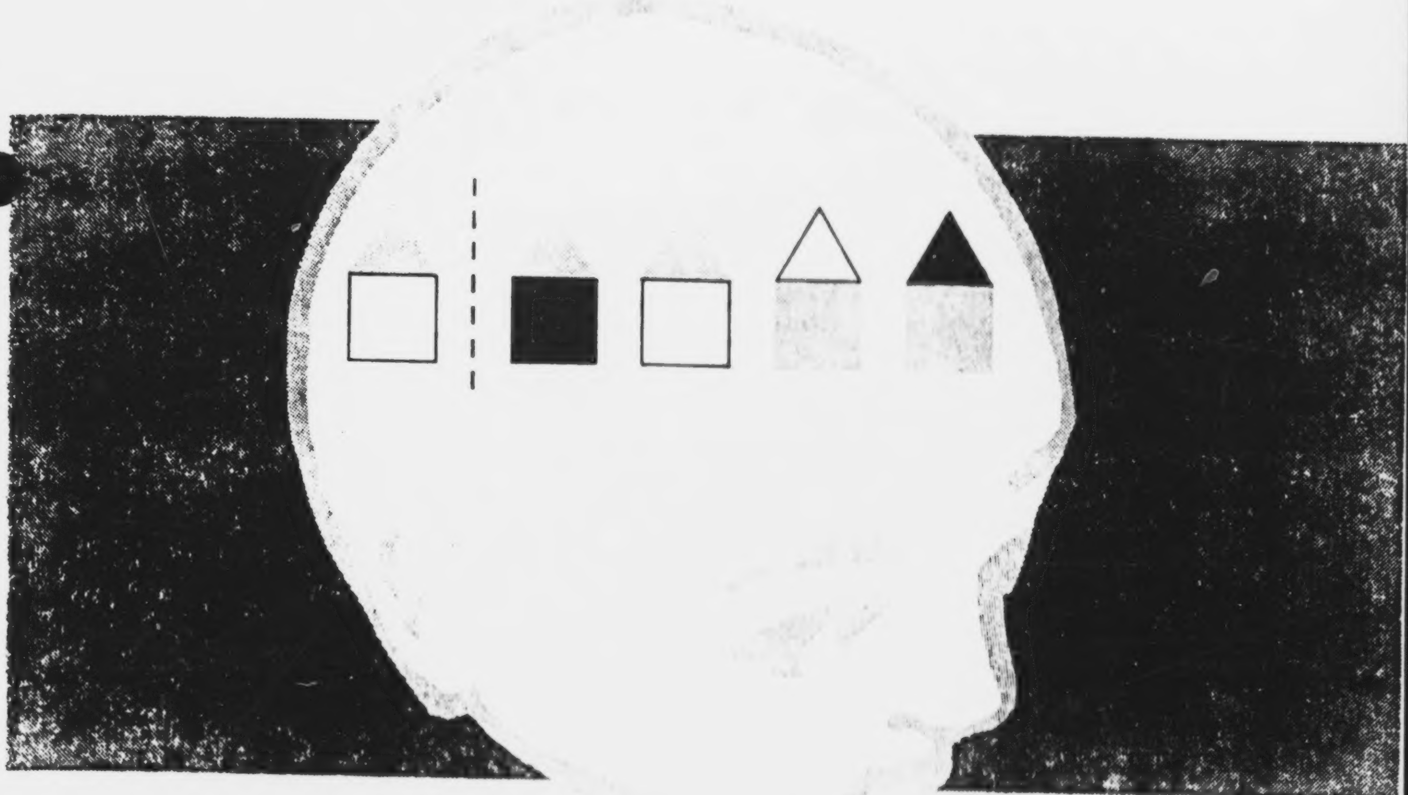
The Fry Graph for Estimating Readability (above) attempts to greatly simplify the effort needed to determine grade level of reading material. In the example above, the dot represents the grade level of a book whose average number of sentences per 100 words is 6.3 and whose average number of syllables per 100 words is 141. The solid line indicates average numbers of words and syllables by grade level. The upper right-hand and lower left-hand corners, shaded in color, are areas in which readability findings are considered unreliable.

EXAMPLE:	SYLLABLES	SENTENCES
First Hundred Words	124	6.6
Second Hundred Words	141	5.6
Third Hundred Words	158	6.8
Average	141	6.3

READABILITY 7TH GRADE (See dot depicted on graph)

Critical Thinking and Thinking Skills: State of the Art Definitions and Practice in Public Schools

Barbara Z. Presseisen



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CHAPTER 2: CRITICAL THINKING: HOW THE CONCEPT IS DEFINED AND WHAT THE RESEARCH SAYS

A. Approaches to the Concept of Critical Thinking

Defining critical thinking can seem as challenging as defining love. The "critical spirit" is composed of attitudes (or dispositions) *and* skills, both of which are essential to the process. Simply mastering a set of discrete thinking skills (recognizing assumptions or drawing conclusions, for example) does not a critical thinker make. This would be critical thinking in the "weak sense" merely learning the micro-skills. Critical thinking in the "strong sense" occurs when both the skills and dispositions are integrated and intrinsic ultimately to the character of a person. It is knowing not only how, but *when* to question something and knowing what kinds of questions to ask.

As described in Chapter 1, this critical spirit is an *attitude* toward inquiry, a *knowledge* of the methods of reasoning and inquiry, and *skill* in applying them. This is akin to Dewey's description of reflective thought as "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends."

Cornbleth (1985) identifies the essence of critical thinking as informed skepticism, as active inquiry rather than passive acceptance of tradition, authority or "common sense." "It is," she says, "a dynamic process of questioning and reasoning, of raising and pursuing questions about our own or others' claims and conclusions, definitions and evidence, beliefs and actions." She rightly notes that critical thinking is not limited merely to the evaluation of statements or arguments, as some narrower views have it, but that, depending on the situation, it involves question raising, seeking information, reasoning, evaluating options, reflecting on one's thinking, and raising and pursuing further questions. The concept is used in its broadest sense here. While critical thinking is not necessarily synonymous with all thought processes beyond memory, or problem solving, or decision making, or the scientific method, or reasoning, critical thinking skills used fairmindedly underlie, overlap and complement these processes. "All thought processes beyond memory" could include creative thinking which involves some elements of critical thinking (ideas once generated need to be evaluated for the best possible combinations) and some unique unto itself (generating the ideas). Problem-solving theory involves a series of steps from problem to solution. Critical thinking encompasses these steps, but it also goes beyond procedural thinking and cannot be reduced to a formula or list of steps to follow because it is also generative and creative. The scientific method consists primarily of verification skills whereas critical thinking is a broader concept that includes additional skills. Reasoning involves inferring from premises to conclusions, while critical thinking encompasses this process and also includes such skills as assuming and interpreting.

The concept of critical thinking used here, while not synonomous with creative thinking, emphasizes the use of imagination and the attitudes and skills that are common to both.

There is a danger, however, in separating critical thinking from creative thinking, says Robert Swartz, Co-Director of the University of Massachusetts at Boston's master's degree program in Critical and Creative Thinking. He says that in developing good thinking skills, students must also develop a sense of where these skills can be most appropriate and effectively used in dealing with problems and issues that call for clear thinking. "We should stand back from these 'skills' approaches and look holistically at good thinking . . . taking a broader perspective means that these lists (e.g., critical thinking, creative thinking, problem solving, decision making) should be viewed as complementing each other . . . in situations where they are best used, the norm, not the exception is to use them in combination, not in isolation."

Seeking an explanation of some event, for example, will be furthered if we consider a number of possible explanations (creative thinking) and sort out the best ones (critical thinking).

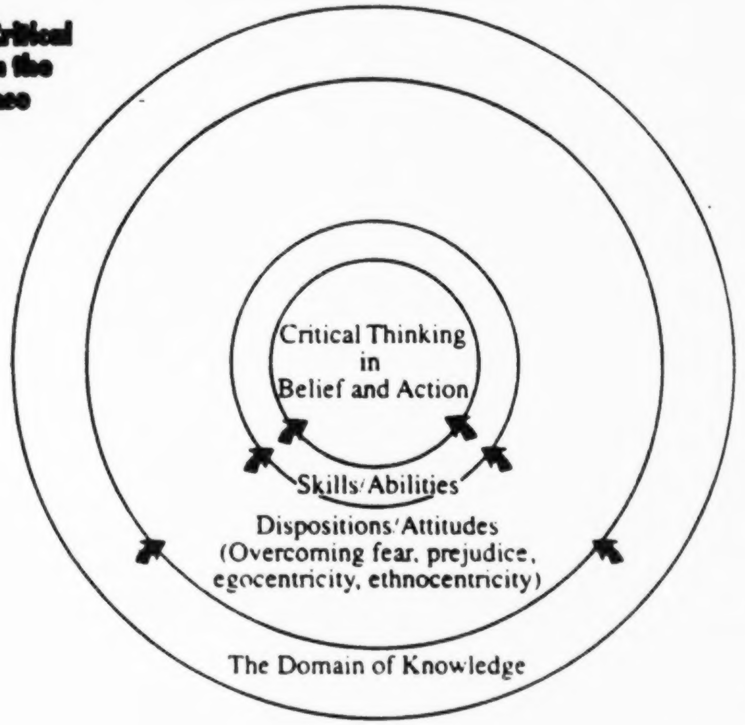
This conception of critical thinking is eclectic in the sense that it draws on several disciplines for their contributions to the knowledge on this issue: the social sciences, philosophy, cognitive science and psychology. Theory and research on problem solving, cognition, metacognition (thinking about thinking), or the inquiry method, all contribute something to our understanding of thinking skills in general, and critical thinking in particular. These contributions are included throughout this discussion.

In summary then, the concept of critical thinking as used here can be defined as fairmindedly *interpreting, analyzing or evaluating information, arguments or experiences with a set of reflective attitudes, skills and abilities to guide our thoughts, beliefs and actions*. This conceptualization can be illustrated by the model in Table 1.

B. Critical Thinking Dispositions and Attitudes

> "The importance of critical thinking can best be evaluated by the undesirable attitudes and beliefs it would eliminate. Biases and prejudices distort the perceptive and reasoning abilities of students to appraise situations, beliefs and arguments accurately." (D'Angelo, 1971)

Table I - Model of Critical Thinking in the Strong Sense



Thinking critically begins with an attitude of being disposed to consider in a thoughtful, perceptive manner the problems and subjects of one's life. In thinking about infusing critical thinking into schooling, it is as important to consider, emphasize, model and encourage this attitude—the critical thinking dispositions—as well as the skills in classroom instruction.

An attitude is a mental posture; a disposition a natural tendency. D'Angelo (1971) identifies the following attitudes as necessary conditions for the development of critical thinking:

1. **Intellectual Curiosity.** Seeking answers to various kinds of questions and problems. Investigating the causes and explanations of events; asking why, how, who, what, when, where.
2. **Objectivity.** Using objective factors in the process of making decisions. Relying on empirical evidence and valid arguments, and not being influenced by emotive and subjective factors in reaching conclusions. (Objectivity can be confused with neutrality, however. It is not necessary that one be neutral to freedom over tyranny, for example, or to the rule of the law over rule of the mob in order to be objective and accurately describe these different systems and their human consequences.)
3. **Open-Mindedness.** A willingness to consider a wide variety of beliefs as possibly being true. Making judgements without bias or prejudice.
4. **Flexibility.** To be willing to change one's beliefs or methods of inquiry. Avoiding steadfastness of belief, dogmatic attitude, and rigidity. A realization that we do not know all the answers.
5. **Intellectual Skepticism.** Postponing the acceptance of a conclusion as being true until adequate evidence is presented.
6. **Intellectual Honesty.** The acceptance of statements being true when there is sufficient evidence, even though it negates some of our cherished beliefs. To avoid slanting certain facts to support a particular position.
7. **Being Systematic.** Following a line of reasoning consistently to a particular conclusion. Avoiding irrelevancies that stray from the issue being argued.
8. **Persistence.** To persist in seeking ways of resolving disputes. Supporting certain points of view without giving up the task of finding evidence and arguments.
9. **Decisiveness.** To reach certain conclusions when the evidence warrants it. To avoid unnecessarily drawn out arguments, snap judgments, and delays in reaching decisions until all necessary information is obtained.
10. **Respect for Other Viewpoints.** A willingness to admit that you may be wrong and that other ideas you do not accept may be correct. Listen-

ing carefully to another point of view and responding accurately to what has been said.

We need to examine the way that our educational system, as currently designed, either fosters or inhibits these attitudes in our students and ultimately define the purpose and goal of schooling. Olson (1985) describes present schooling as "obedience training:" "Education tends to teach us to conform; to solve non-creative problems (those with the answer at the back of the book); to reward coming up with an idea and not taking the action required to implement our idea. It makes us trust written material such as books too much; leads us to believe that others who are more wise have the real answers and separates learning from doing . . . our educational system leads us to believe that failure is wrong and of no value."

Many of these accusations have validity. When the system overemphasizes content coverage, performance on standardized tests which primarily measure the lower order thinking skills of recall and rote, and unquestioning acceptance and docility in students, then that is what the schools will continue to produce.

Other obstacles to effective and creative thinking include habit, limited availability of time, need for immediate solutions, criticism by others, fear of failure, and complacency. Much of our thinking is subconscious and automatic and is based on our conditioning and biases. We hear only what we want to hear, and believe only what we want to believe. Irrational thinking is based on self-deception, fear and selectivity of information to fit our beliefs. Habits are reactions and responses which we learn to perform automatically without having to think and decide. It is usually very hard and uncomfortable to change bad habits.

An emphasis on rational thinking versus irrational thinking in school and throughout life can help students recognize self-deception, selectivity of information, and the fallacious arguments of others. Rational thinking is based on evidence and fair minded thought. It involves learning the bases of our ideas—their motivational sources. It involves going beyond looking just for the evidence to support our beliefs, being able to analyze arguments and assess the validity of conclusions, being able to reason fairly within opposing viewpoints.

One's approach to the world, or "world view" is a philosophy or set of background beliefs which provide a filter through which we perceive the world. Reasoning based on a distorted or inaccurate world view yields distorted and inaccurate conclusions no matter how good our reasoning, says Kahane (1983). There is a difference between thinking critically and using critical thinking skills. The skills can be used to support prejudices and narrow-mindedness unless we learn how to identify our point of view and protect against just assuming its correctness. Reasonable people have always differed seriously in their world view even when they are exposed to the same evidence. It is their *use* of the evidence that fits their world view that makes a difference. What people remember about an episode is the product of their own construction of the world, their experiences, attitudes and expectations.

The schools should play the vital role of helping students develop accurate world views so that they may be able to assess information accurately and fairly, whether it be a history lesson or an incident in their daily lives, thereby becoming more aware of and hopefully reducing the effects of bias, prejudice and self-deception in their thinking.

Schools need to begin to explode the myth of the "one right answer" as part of its effort to foster critical thinking. This myth simply misrepresents the real world where many questions do not have right—or even good—answers. There are issues in the logically messy "real world" of everyday life where one has to deal with opposing points of view and contradictory lines of reasoning. This requires a willingness to listen and analyze contending perspectives on an issue. Not all issues can be reduced to a single point of view. This type of "reasoned judgment" is akin to the jury we expect to enter empathetically into the arguments of both the prosecution and defense. We want the strongest possible case to be made on both sides. The schoo[illegible] work toward developing such reasoned judgment. T[illegible]ed is perhaps the most challenging since these dispositions and skills are not acquired naturally, automatically.

We may also need to reexamine an environment where mistakes are equivalent to sins, the impact of this environment on risk-taking with one's thoughts and ideas, and the role that competition plays in fostering or inhibiting critical thinking. In some experimental studies specifically designed to reduce competitiveness and increase cooperation in learning (Johnson and Johnson, 1981), cognitive outcomes included retention, application and transfer of information, concepts and principles; problem-solving ability and success, creative ability; and divergent and risk-taking thinking. Affective outcomes included acceptance and appreciation of cultural, ethnic and individual differences, reduction of bias and prejudice; pluralistic and democratic values; valuing education; and positive attitudes toward school and self.

Raths says that when teachers emphasize thinking in conjunction with subject matter, students' thinking improves and learning is enhanced. When there is an acceptance and discussion of the thinking of students, they become less dogmatic, less rigid, less impulsive and will suspend judgment and deliberate and examine alternatives before reaching a conclusion.

Robert Ennis, Professor of Education and Director of the Illinois Thinking Project at the University of Illinois, Urbana-Champaign, who has been engaged in the study of critical thinking ability (what it is and how to teach and test for it) since the mid-1950s has developed what he calls "Goals for a Critical Thinking/Reasoning Curriculum" (1985). His definition of critical thinking ("reasonable and reflective thinking that is focused on deciding what to believe and do") involves both dispositions and abilities. The essential dispositions he has identified for thinking critically are the tendency to:

1. Seek a clear statement of the thesis or question
2. Seek reasons
3. Try to be well informed
4. Use credible sources and mention them

5. Take into account the total situation
6. Try to remain relevant to the main point
7. Keep in mind the original and/or basic concern
8. Look for alternatives
9. Be open-minded
   a. Consider seriously other points of view than one's own (dialogical thinking)
   b. Reason from premises with which one disagrees—without letting the disagreement interfere with one's reasoning
   c. Withhold judgement when the evidence and reasons are insufficient
10. Take a position (and change a position) when the evidence and reasons are sufficient to do so
11. Seek as much precision as the subject permits
12. Deal in an orderly manner with the parts of a complex whole
13. To be disposed to use the listed critical thinking abilities
14. Be sensitive to the feelings, level of knowledge, and degree of sophistication of others

These dispositions and attitudes must be included in any approach to infuse the curriculum with thinking skills. They can be modeled, discussed, emphasized, their use rewarded, their misuse identified. Teachers have incredible power and this "affective" component of teaching for thinking is as important as the cognitive. Kahn and Weiss (1973), for example, have found that it is the quality of certain teacher interactions that determine the degree of trust, risk-taking, level of cognition, warmth, rapport, openness and psychological safety in the classroom. Lowery (1979) even found that the way the teacher responds is more influential in determining students' behavior than what the teacher asks or tells the students to do. We know that children acquire much of their behavior, feelings, attitudes and values through imitation of significant adults in their lives. Teachers can use this power to transform their classrooms into true communities of inquiry.

Paul (1982, 83, 86) has written a series of articles which stress the need to link curricular reform with a special emphasis on dialogical thinking. In this model students learn to role-play and reason within opposing points of view, both with respect to disciplinary issues and those which go beyond or cross disciplinary lines. He calls this kind of thinking multi-logical (in crossing domains and points of view) and contrasts it with monological thinking (thinking that is exclusively within one point of view or belief system).

Paul argues that most present instruction, most text books, and most student thinking are monological while most of the important issues of everyday life are multilogical. He argues that prejudice, bias, and irrationality can be overcome only by cultivating the art of thinking dialogically.

Paul developed an explicit, "strong sense" approach to critical thinking. By creating opportunities for students to reconstruct the points of view of others, Paul believes simultaneous intellectual and affective growth will be significantly promoted. He, like Piaget, believes that empathetically entering into the reasoning that supports beliefs other than our own and experiencing the case that can be made for and against them dialogically helps the student to separate his identity from the particular *content* of beliefs. He encourages students to focus instead on the *process* of rationally establishing their beliefs, encouraging them to develop a conception of themselves as open to new and different ideas and not as uncritically *fixed* in any beliefs. For Paul whether or not students ego-identify with particular beliefs (become so personally identified with them as to perceive a challenge to them as a challenge to themselves) is a crucial determinent in whether or not they have learned to think critically in the strong sense.

To maximize this kind of global change, Paul emphasizes providing students with micro-skill practice in the midst of macro-ability use. He reduces micro-skill drill to a minimum and focuses classroom activities on major macro-abilities. 1) the ability to question Socratically (students learn how to question each other's beliefs and reasons: probing for evidence, reasons, assumptions, implications), 2) the ability to reconstruct the thinking of others (reciprocity), and 3) the ability to engage in the give-and-take of intellectual exchange (students learn not how to score points or to defeat other perspectives, but rather how to gain a clearer grasp of strengths and weaknesses within opposing viewpoints). Paul views egocentricity and sociocentricity as the major impediments to strong sense critical thinking. His emphasis on dialogical assignments and dialogical teaching is designed to break down these deep-seated structures and make possible the development in the student of a more "rational" self.

The significance of the dialogical approach is suggested by recent studies by David Perkins of Harvard who found that there was no significant correlation between intelligence and open-mindedness. He found that intelligent people have as strong a tendency to closedmindedness as those less intelligent. His conclusion is that if we want open-mindedness we need to teach for it through something like a dialogical approach. This point is further illustrated by a recent study of attitudes toward dissent among West German youth, reported by Summers, *et.al.* (1986):

> "The central finding of this study was that young people who showed high tolerance for viewpoints different from the majority on specific subjects had been more exposed to controversy or conflict than those who had little tolerance for dissenting views. Even more to the point, the greater the reported frequency with which controversial topics had been entertained in classrooms, the higher the tolerance of students toward dissenting viewpoint."

Jack Easley has pioneered the application of dialogical instruction to the domains of math and science, arguing that even when issues are monological it is essential for children to build their understanding of them through classroom instruction that is dialogical:

> "Those few students who do truly master mathematical or scientific subjects do so through a long pro-

> cess of doubting and challenging authority . . . Teachers of regular primary grade classes should train group leaders on a regular basis to provide appropriate challenges for every member of their group . . . Primary children should strive first to develop expression in some form by working in heterogeneous groups, trying to convince each other by clear speaking and writing . . . As children discover they have different solutions, different methods, different frameworks, and they try to convince each other, or at least to understand each other, they revise their understanding in many small but important ways."

Paul asserts there is a pressing need to develop more curriculum which emphasizes multi-logical issues as well as classroom strategies that focus on dialogical reasoning, and that only when more classroom emphasis is place on dialogical thinking will we be able to fully appraise its potential impact.

C. Critical Thinking Skills and Abilities

Ralph Johnson and Anthony Blair, two leaders in the critical thinking movement from the University of Windsor, Canada have integrated the disposition/skills parallel by describing the critical thinker as a person who is disposed to ask the following questions and has the skills to pursue their answers:

1. Is it clear? (What does it mean?)
2. Is that right? (true? plausible? likely?)
3. How can anybody know that?
4. What is the evidence for it?
5. What is the negative evidence for it? (What other possibilities are there?)
6. What are its implications? (or consequences?)
7. What are the unstated assumptions at work here? (Johnson and Blair, 1985)

The abilities that Ennis identifies are classified according to five different categories:

I. **Elementary Clarification**
  1. Focusing on a question
  2. Analyzing arguments
  3. Asking and answering questions of clarification

II. **Basic Support**
  4. Judging the credibility of a source
  5. Observing and judging observation reports

III. **Inference**
  6. Deducing and judging deductions
  7. Inducing and judging inductions
  8. Making and judging value statements

IV. **Advanced Clarification**
  9. Defining terms and judging definitions
  10. Identifying assumptions

V. **Strategy and Tactics**
  11. Deciding on an action
  12. Interacting with others

A summarization of many current lists of critical thinking skills would include the following skills:

1. Identifying central issues
2. Recognizing underlying assumption
3. Recognizing stereotypes and cliches
4. Recognizing bias, ethnocentricity, propaganda, or emotional factors in a presentation
5. Distinguishing between verifiable and unverifiable data
6. Distinguishing between relevant and nonrelevant data
7. Distinguishing between essential and incidental
8. Recognizing the adequacy of data
9. Determining whether facts support a generalization
10. Checking consistency
11. Drawing warranted conclusions or inferences
12. Formulating or evaluating hypotheses
13. Reference skills
14. Evaluating reliability of data
15. Distinguishing facts from opinion and reasoned judgment
16. Determining validity or soundness of an argument
17. Judging whether a theory is warranted
18. Exhibiting explanatory skills
19. Judging whether a statement is overvague or overspecific
20. Comparing similarities and differences among ideas or events
21. Classifying items according to rational criteria
22. Making informed judgments
23. Drawing applications to a different context
24. Relating cause and effect
25. Making decisions
26. Evaluating questions
27. Building theories

(California Assessment Program (CAP), California State Department of Education, 1984)

An emphasis on these skills and abilities is quite different from the current emphasis in most schools. School practices have resulted in teachers for the most part using the expository, or didactic mode of teaching (telling, explaining, showing). The teacher is active, the student passive. While these techniques are important, fostering thinking skills further requires that students actively *do* something with the information. Knowledge presupposes comprehension and rational assessment.

The question is, however, how do we move from a list or lists of critical thinking skills to actual "infusion" of these skills into the various disciplines and at the various age and developmental levels of our students? While specific teaching strategies and examples will be described in Chapter 3, it may be useful at this point to study one example of a state-wide effort to identify and define critical thinking skills at various grade levels K-12 to provide an overall framework for educators from which to work thereby building some continuity into school-wide or district-wide approaches to teaching for thinking.

As mentioned, California is considered to be at the beginning of a series of reforms directed toward enhancing students' critical thinking skills. An advisory committee using member input, the state's curriculum framework, teacher survey results and consultation with prominent critical thinking experts, identified skills that they perceived as essential for critical thinking. According to Kneedler (1984), the skills are presented as elements of a much larger process in solving problems or reaching conclusions. Though the skills are presented serially for clarity and understanding, there is a recognition that students do not necessarily think this way—that these and other skills are used in a variety of combinations to solve problems.

Tables I - V illustrate the skills and levels of their use at grades 3, 6, 8, 10 and 12. The skills that were decided upon are clustered into three broad categories: *Clarifying issues and terms, judging and utilizing information, and drawing conclusions*. The generic skills remain the same throughout the grade levels but the levels of sophistication and transfer are expected to progressively develop.

Under clarifying issues and terms there is the following sequence:

3rd grade - makes careful observations

6th grade - can distinguish clear from unclear formulations of simple issues or problems

8th grade - can identify central issues or problems

10th grade - can delineate controversial components

12th grade - can distinguish real and unstated problems

Under judging and utilizing information:

3rd grade - identifies obvious stereotypes

6th grade - understands the idea of a stereotype and cliche

8th grade - can recognize stereotypes and cliches

10th grade - can recognize subtle manifestations of stereotypes and cliches

12th grade - can distinguish between images and reality

And finally, as an example of skill in drawing conclusions:

3rd grade - recognizes the adequacy of data

6th grade - understands the idea of drawing conclusions from evidence

8th grade - can identify reasonable alternatives

10th grade - can justify the selection of an alternative

12th grade - can generate reasonable alternatives

While listing essential skills involved in critical thinking is helpful, a problem with lists, steps and procedures is that they imply that critical thinking is or should be linear and step-by-step which it rarely, if ever, is. The kind of questioning and the means to pursue the answers depend to a major extent on the situation, the ideas encountered, the social context of the encounter, and the prior knowledge and values of the questioner. Critical thinking, concludes Cornbleth, cannot be reduced to a universally applicable formula of skills or steps to follow but is a creative or generative process in ways analogous to writing or sculpting.

Thinking is natural, but unfortunately critical thinking is not. It is a skill capable of being perfected. It is also a matter of degree. No one is without any critical skills whatsoever and no one has them so fully that there are no areas for improvement. It is also important to remember that critical thinking is not the equivalent of intelligence. Persons of average intelligence can be trained to use their mental ability more productively. The evidence suggests that these skills and abilities *can* be taught, that critical thinking skills can increase academic success, and that the earlier the skills are incorporated throughout a child's education the better.

Table I - Third Grade Critical Thinking Skills

I. Clarifying Issues and Terms

A. Makes careful observations
B. Identifies and expresses main idea, problem, or central issues
C. Identifies similarities and differences
D. Organizes items into defined categories
E. Defines categories for unclassified information
F. Identifies information relevant to a problem
G. Formulates questions
H. Recognizes different points of view

II. Judging and Utilizing Information

A. Identifies obvious stereotypes
B. Distinguishes between fact and opinion
C. Identifies and explains sequence and prioritizing
D. Identifies evidence that supports (or is related to) a main idea
E. Identifies obvious assumptions
F. Identifies obvious inconsistency and contradiction
G. Identifies cause and effect relationships

III. Drawing Conclusions

A. Recognizes the adequacy of data
B. Identifies cause and effect relationships
C. Draws conclusions from evidence
D. Puts simple hypotheses into "if, then" sentences

Table II - Sixth Grade Critical Thinking Skills

I. Clarifying Issues and Terms

- A. Can distinguish clear from unclear formulations of (simple) issues and problems
- B. Notes obvious similarities and differences
- C. Understands the concept of relevance and irrelevance
- D. Can recognize simple appropriate and inappropriate questions
- E. Able to express problems and issues
- F. Can recognize obvious individual and group value orientations and ideologies

II. Judging and Utilizing Information

- A. Understands the idea of a stereotype and cliche
- B. Understands the idea of bias, propaganda, semantic slanting
- C. Understands the idea of fact, opinion, and reasoned judgment
- D. Understands the idea of inconsistency and contradiction
- E. Understands the idea of assumption
- F. Understands the idea of evidence

IV. Drawing Conclusions

- A. Understands the idea of drawing conclusions from evidence
- B. Understands the idea of predictory consequences
- C. Understands the concept of hypothesizing
- D. Can put simple hypotheses into "if, then" sentences
- E. Understands the idea of an analogy, and a generalization
- F. Understands the idea of implication

Table III - Eighth Grade Critical Thinking Skills

I. Clarifying Issues and Terms

- A. Can identify central issues or problems
- B. Can identify similarities and differences
- C. Can determine which information is relevant
- D. Can formulate appropriate questions
- E. Can express problems clearly and concisely
- F. Can recognize individual and group value orientations and ideologies

II. Judging and Utilizing Information

- A. Can recognize stereotypes and cliches
- B. Can recognize obvious bias, emotional factors, propaganda and semantic slants
- C. Can distinguish among fact, opinion and reasoned judgment
- D. Can recognize simple inconsistencies and contradictions
- E. Can recognize simple unstated assumptions
- F. Can recognize clearly insufficient data

III. Drawing Conclusions

- A. Can identify reasonable alternatives
- B. Can predict possible consequences
- C. Can test conclusions or hypotheses
- D. Can reason hypothetically
- E. Can identify causal claims/generalizations/analogies
- F. Can recognize immediate implications

Table IV - Tenth Grade Critical Thinking Skills

I. Clarifying Issues and Terms

A. Can delineate controversy components
B. Can identify criteria that best organizes data
C. Can identify fallacies or relevance
D. Can formulate appropriate questions
E. Can paraphrase accurately
F. Can distinguish among diverse viewpoints

II. Judging and Utilizing Information

A. Can recognize subtle manifestations of stereotypes and cliches
B. Can recognize subtle manifestation of emotional factors, propaganda and semantic slants
C. Can distinguish among fact, opinion, and reasoned judgment in subtle cases
D. Can recognize subtle or indirect inconsistencies
E. Can recognize subtle or "buried" assumptions
F. Can recognize subtle differences in judging the sufficiency of data

III. Drawing Conclusions

A. Can justify the selection of an alternative
B. Can distinguish between possible and probable consequences
C. Can tailor conclusions strength to evidence
D. Can reason within opposing points of view
E. Can recognize fundamental problem in causal claims/generalizations/analogies
F. Can recognize indirect or extended implications

Table V - Twelfth Grade Critical Thinking Skills

I. Clarifying Issues and Terms

A. Can distinguish real and stated issues
B. Can identify the most satisfactory interpretation of data
C. Can determine degrees of relevance
D. Can formulate appropriate questions
E. Can articulate positions and support
F. Can compare political economic, legal and social systems

II. Judging and Utilizing Information

A. Can distinguish between images and substance
B. Able to write sentences and material into "unbiased" form
C. Able to use facts, opinions, and reasoned judgments in an effective manner in speeches and writing
D. Demonstrates a sensitivity to subtle inconsistencies in reading and writing
E. Demonstrates a sensitivity to questionable assumptions in reading and writing
F. Demonstrates an ability to marshall data and use it effectively in coming to reasoned judgments

III. Drawing Conclusions

A. Can generate reasonable alternatives
B. Can anticipate desirable and undesirable consequences
C. Demonstrates the ability to come to a reasoned judgment in reading, writing, and speech
D. Demonstrates a sensitivity to the "strongest" forms of opposing points of view
E. Can develop and assess causal claims
F. Can develop an extended line of reasoning, taking into account problematic implications

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DeAnza College
Critical Thinking

CRITICAL THINKING SKILLS

The following was extracted from a paper compiled by Anita Silvers (Philosophy, San Francisco State University) from materials supplied by members of the panel on Critical Thinking Across the Curriculum, 1984 Articulation Conference.

At the postsecondary level, good reasoning skills should be enhanced by instruction which re-enforces preparatroy study of the reasoning operations characteristic of the various disciplines, and by instruction which focuses explicitly on the techniques of critical and constructive thinking. There are two broad categories into which reasoning patterns fall: deductive and inductive. Postsecondary students should be able to satisfy the standards of these reasoning patterns when criticizing or constructing arguments. By employing proper deductive reasoning patterns, they can proceed with certainty from true premises to a true conclusion. Good inductive reasoning enables them to select conclusions which are not certain but have the best probability or strongest evidence of being true.

Instruction in mathematics should include:

1. Introduction to fundamental reasoning patterns and recognition of these patterns as they are used appropriately both in mathematics and in other content areas.
2. Meaning and use of quantifiers (such as 'all' and 'some'), logical connectives (such as 'if,' 'then' and 'and'), and logical operators (such as 'not'), logical formulations of hypotheses and generalizations.
3. Recognition and application of general principles.
4. Testing for assumptions and implications.
5. Standards of proof for deduction and induction, including valid and invalid deductive forms.
6. Several modes of induction, such as enumeration, analogies, extension of a pattern of thought, and probability.

Instruction in Science should include:

1. Reasoning from observations to explanatory or predictive conclusions.
2. Understanding the functions of definitions, concepts, and quantifications in formulating hypotheses.
3. Assessing the truth of claims about facts and states of affairs.
4. Formulating and evaluating causal, statistical and probability generalizations.

3. Identifying central issues and problems.
4. Delineating facts from opinions, interpretations and conclusions.
5. Identifying assumptions and presuppositions.
6. Detecting stereotypes, biases, emotive devices and semantic slanting.
7. Acknowledging similarities and differences in value systems and ideologies.
8. Formulating and assessing explanatory predictive hypotheses through use of appropriate inference patterns.
9. Checking for consistency.
10. Applying rational procedures in arriving at conclusions expressing moral, political, economic and social valuations.

cc
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Breaking the Attrition Cycle

The Effects of Supplemental Instruction on Undergraduate Performance and Attrition

Numerous factors appear to influence retention rates. Among these are student perception of progress toward an academic career goal [18], a high level of faculty-student interaction [2, 19], and personal counseling and academic advising programs [5, 7]. General upgrading of educational services has been suggested as an additional strategy for increasing retention [14].

In their efforts to reduce attrition, many colleges and universities now provide some form of academic support services. A well-designed learning assistance program can influence retention [9, 12]. Typical programs, however, tend to serve small numbers of students at a high per student cost. Moreover, little empirical data exists concerning the effectiveness of such programs.

The purpose of this article is to describe an academic support program found to be effective in addressing the problems of student performance and attrition at an urban institution of eleven thousand students. The program rationale and description is followed by empirical data evaluating the effectiveness of the services as measured by (1) between-group performance difference in entry-level arts and sciences courses, (2) student reenrollment at the university in succeeding semesters, and (3) longitudinal shifts in grade distribution patterns.

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subject while providing quality instruction in the reading, writing, and thinking skills necessary for content mastery. Each instructor defines the resource person's role in accordance with what the instructor thinks is appropriate. This role varies somewhat according to the nature of the discipline and the instructor's teaching style and priorities.

It is important to note that students typically perceive their need as largely content-centered. Experience shows, however, that the most common need is for the prerequisite learning and thinking skills that are basic to content mastery. Recent evidence [1] suggests that 50 percent of entering college freshmen have not attained reasoning skills at the formal (abstract) operational level described by Piaget and Inhelder [13]. Students who appear to operate at the concrete (nonabstract) level consistently have difficulty processing unfamiliar information when it is presented through the abstract media of lecture and text. Their questions about material are often detail-oriented and superficial. Rarely do they ask or answer questions that require inference, synthesis, or application. They can operate at more advanced levels once they have mastered a concept, but they require regular instruction that either anchors the concept directly in the student's previous experience or provides a concrete experience with data from which the concept may be drawn [3, 6, 8, 16].

Experience has shown a profound difference exists between students who operate at the formal level and those who operate at preformal levels. The former more readily perceive a series of concepts as an integrated system, whereas the latter may see only a series of facts to be memorized under an arbitrary heading. This problem is complicated in foundation courses in which the most common means of assessment is the student's performance on detail-oriented exams which, by their design, reinforce rote memory. It is therefore possible for students both to achieve high marks in courses and to fail to understand the principal concepts that must be assimilated if they are to retain and utilize the memorized material. The effect of these differences in learning patterns surfaces in more advanced courses that require students to demonstrate an integration and application of the knowledge they have previously acquired.

Perhaps the most important aspect of SI is the leader's attention to the reasoning and questioning skills. The leader makes a conscious effort to assess the quality of student questions and responses and to identify those students whose present levels of thinking appear to limit their mastery of new concepts. Recent research studies with a wide variety of high school populations indicate that substantial gains in the level of these skills can be achieved expeditiously through appropriate strategies and techniques [4, 11, 17]. In large part, SI follows a "learning cycle" format [3, 6, 8, 15, 16].

The following differences can be seen in the performance data. Students utilizing SI services (1) have entry data (high school class rank percentile and college entrance test scores) comparable to data of the motivational control group and lower than the other non-SI students—therefore, the groups appear equivalent in terms of prior academic achievement; (2) have significantly higher average semester GPA's than both non-SI groups ($p < 0.01$); (3) have significantly higher average course grades compared to both non-SI groups ($p < 0.01$); and (4) have considerably fewer D and F grades and withdrawals[1] than either of the non-SI groups ($p < 0.05$).

TABLE I

Mean Performance for Students Enrolled in Seven Arts and Sciences Courses, Spring Semester 1980 ($N = 746$)

		Non-SI Group	
Measures	SI Group ($N = 261$)	Motivational Control ($N = 132$)	Others ($N = 353$)
High school class rank (percentile)*	72.5	71.4	80.8
Converted test score (percentile)*	56.2	56.2	58.7
Course grade**	2.50	2.12	1.57
GPA, spring semester 1980**	2.70	2.36	2.25
Percentage D, F, & W's***	18.4	26.5	44.0

NOTES: Courses served by Supplemental Instruction (SI) were Biology 109, Chemistry 212 and 222, Economics 201 and 202, and History 1020 and 2020. All were entry-level courses for the particular discipline. Mean course grade was based upon a 4.0 scale (A = 4, B = 3, C = 2, D = 1, and F = 0).

*Level of significance: N.S.

**Level of significance: 0.01 using *t*-test.

***Level of significance: 0.05 using chi-square test.

It is clear that motivation alone does not account for all of the differences between the SI and non-SI students for the measures investigated. There are significant and substantial differences between the SI group and the motivational control group in course grade, in semester GPA, and in percentage of unsuccessful enrollments.

Reenrollment Data

Two semesters of reenrollment data for the 746 students were collected and analyzed. Table 2 summarizes these data, comparing reenrollment of the SI group with that of the non-SI group. No measure of students' through more traditional services; once involved, they tend to be difficult both to retain and to assist effectively.

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[1] Only those students who leave the course after the class roster becomes official (i.e., three to four weeks into the semester) are recorded as actual withdrawals.

The data support the conclusion that high-risk students do utilize Supplemental Instruction, and that both performance and retention appear to be improved by SI attendance. It is also noteworthy that SI services appear to meet the needs of students with a wide range of abilities within the same group setting, thus reducing the necessity for the institution to provide additional tutorial programs.

TABLE 3

Course Grade and Reenrollment Statistics of Students Using and Not Using SI, by Entry-Test Score Quartile

Group	Percentage of Group	Course Grade	Percentage Reenrollment during Subsequent Semester
Top Quartile (N = 149)			
SI	30	3.10*	86%**
Non-SI	70	2.30*	78%**
Bottom Quartile (N = 75)			
SI	31	1.72*	74%**
Non-SI	69	0.88*	62%**

Note: Top quartile students were those scoring in the 75–99th percentile range on entrance tests, and the bottom quartile students were those scoring in the 0–25th percentile range.

*Statistical test and level of significance: 0.05 using *t*-test.

**Statistical test and level of significance: 0.10 using chi-square test.

Longitudinal Shifts in the Percentage of D and F Grades and Withdrawals

The question of longitudinal shifts in grade distribution patterns with the addition of SI is addressed in data from an introductory economics class taught by the same professor during 1976–80, but no services were offered during 1976–77. The data are presented in Table 4.

Significant differences in the percentages of unsuccessful enrollments occurred after SI services were introduced into the entry-level course. Analysis of attendance data in SI during 1978 showed that 13 percent of the enrolled students participated in the service. During 1979 and 1980, 32 percent and 45 percent participated, respectively. A substantial reduction in the rate of unsuccessful enrollments occurred during the five-year period. Similar reductions in unsuccessful enrollments have been observed repeatedly in other courses where instructional techniques and the methods used to evaluate students' performance (grading scales; the types, difficulty, and frequency of examinations) remained consistent for the period observed.

sential to SI effectiveness. Such attendance contrasts sharply with the more common tutorial practice of providing instruction based largely upon the students' perceptions of what occurred in class. Since these perceptions are often badly distorted, students do not get the kind of assistance they need.

4. SI is not viewed by students as a remedial program. In fact, the first students to volunteer are usually those who tend to be better prepared academically. The willingness of this group to participate works to encourage participation from less able students who often find it difficult to admit that they need assistance.
5. SI sessions are designed to promote a high degree of student interaction and mutual support. Such interaction leads to the formation of peer study groups, and it facilitates the mainstreaming of minority and disadvantaged students.
6. SI provides an opportunity for the course instructor to receive useful feedback concerning the kinds of problems students encounter. Students generally hesitate to be candid about academic concerns to course instructors for fear of demeaning themselves. They will, however, openly acknowledge their problems to the resource person whose duty it is to assist in such matters, and whose responsibility does not include assessment of students' course performance.

It is noted that as the SI leader seeks the instructor's counsel in dealing effectively with student concerns, the instructor gains the kinds of information necessary to make instructional changes, or to add new dimensions to the course. The program staff has worked with instructors to develop such aids as pretests for use on the first day of class, practice tests, video tapes of review sessions, concept sheets and study guides, and vocabulary lists of key terms for the course.

It is also interesting that student evaluations of some course instructors have been higher after attaching SI to the course. If SI is a factor in higher evaluations, it may be because students attribute the assistance offered through SI to the course instructor. This seems likely, since instructors regularly encourage students to participate and sometimes drop in on SI sessions to offer assistance. SI attendance, however, is never reported to the instructors until after final grades are recorded, and instructors do not give preferential treatment to students who attend.

Aside from the factors that may contribute to student retention and related issues, the design for program evaluation merits specific mention. The evaluation design is offered as a general approach that may prove useful to institutions as they attempt to monitor retention programs and efforts. This particular means of program evaluation has proved success-

H. Kellogg. *Research, Teaching, and Learning with the Pieget Model*. Norman, Okla.: University of Oklahoma Press, 1976.

17. Schneider, L. S., and J. W. Renner. "Concrete and Formal Teaching." *Journal of Research in Science Teaching*, 18 (November 1980), 503–17.
18. Steele, M. W. "Correlates of Undergraduate Retention at the University of Miami." *Journal of College Student Personnel*, 19 (September 1978), 349–52.
19. Wilson, R. C., J. G. Gaff, E. R. Dienst, L. Wood, and J. L. Baury. *College Professors and Their Impact on Students*. New York: Wiley, 1975.

Supplemental Criteria for the Classification of ESL Courses According to the New Course Standards

In the past ten years, English-as-a-Second Language (ESL) has become, without a doubt, one of the educational areas which has grown most quickly. Demographic changes, passage of the Refugee Assistance Act and the more recent Immigration Reform Control Act (IRCA) at the federal level, in addition to the passage of Proposition 63 (the English Only Proposition) -- all have combined to create an increased need and demand for ESL instruction.

Most recently, in direct response to a request made by the state Legislative Analyst's Office, Chancellor's staff prepared a report which estimated the ADA (both credit and noncredit) generated by ESL course offerings. These estimates indicated that in the 1986-87 academic year approximately $67 million were generated by ESL courses. This compares to $61 million in 1985-86 and $53 million in 1984-85.

In addition to their fiscal significance, ESL course offerings have been at the center of the academic debate, particularly as the issue of remediation is discussed. In 1984 the California Postsecondary Education Commission (CPEC) published a report, *Promises to Keep*. The purpose of this report was to improve and agree upon an intersegmental definition for remediation. As a result of Chancellor's Office participation and community college input, the CPEC study stated that unlike reading, writing, and computational skills, ESL did not fit entirely within the definition of remediation.

In January 1985, specific Board of Governors policies were adopted in the form of eight recommendations requiring further staff work specific to ESL (see Attachment A). Even then, recommendations were made (see recommendation #2) that recognized the need for supplemental criteria to Title 5 which would help faculty in the proper classification of ESL courses. The key points made in these recommendations still apply. Following is a restatement of the basic tenets raised in those recommendations. The wording has been updated to coincide with the new proposed Title 5 course standards:

- Like any other instructional area, ESL is subject to the same criteria as specified in Title 5 of the Administrative Code. If credit and degree applicable, the course must meet the requirements of Title 5, 55002a(1-13) and 55805; if credit but not degree applicable, Section 55002b(1-7); if noncredit, 55002c(1-4) and Education Code Section 84711a(1-9).

- In order to facilitate the classification of ESL courses and because of the unique student characteristics applicable to ESL, additional factors should be considered which focus on: a) the use of placement test scores as prerequisites for entrance into a credit course, and b) the course focus -- is the course offered in support of, or as part of, an academic program -- does the course transfer to a four-year college?

The following table helps to illustrate the various options under which ESL courses may be classified.

English as a Second Language Course Classification Options

Minimal Criteria	Degree	Non-Degree	Noncredit
1. The course prepares students for academic work	X	X	
2. Is a VESL course concurrently taken with credit Vocational Education	X	X	
3. Is a pre-VESL course		X	X
4. Is equivalent to English 1A or is one level below 1A	X		
5. Uses test scores as a prerequisite	X	X	X
6. Teaches survival skills only			X

Attachment A

English as a Second Language Recommendations
Adopted by the Board of Governors of the California Community Colleges
May 31, 1985*

Issue: *ESL is currently offered under at least nine different departments and classified under five separate TOP Codes.*

Recommendation #1: Establish a uniform Taxonomy of Programs (TOP) Code classification for all ESL course offerings.

Issue: *Given the recent mandates to develop stricter criteria for credit and noncredit offerings, confusion exists over the appropriate designation for ESL.*

Recommendation #2: Complement Title 5 criteria for credit/noncredit offerings with additional operational criteria to help in the differentiation between credit and noncredit ESL.

Issue: *Of the 89 colleges which offer ESL, 57 offer ESL only for credit. In these areas of the state, noncredit offerings are the sole purview of the K-12 districts.*

Recommendation #3: Provide alternative options for colleges with credit-only programs to enable them to serve all students.

Issue: *As many as 21 different assessment instruments are used statewide; therefore, placement decisions vary from college to college leading to problems concerning student transfers from college to college.*

Recommendation #4: Facilitate more uniform practices through the establishment of an ESL committee to review and correlate various language assessment instruments; recommend assessment and placement procedures and act as a clearinghouse for research on language testing conducted by local districts.

---

* Excerpted from the Board of Governors Agenda, May 30-31, 1985, Item 3: *English as a Second Language: Statement of Findings and Policy Recommendations*

Issue: *There are no uniform criteria for the various levels of ESL course offerings as such. Problems exist relating to ESL-level equivalencies from college to college.*

Recommendation #5: Facilitate course content equivalencies for the beginning, intermediate and advanced ESL levels through statewide guidelines.

Issue: *The University of California and California State University also offer ESL. Intersegmental articulation concerns have arisen, particularly in regard to the ESL levels which are the equivalent of English Composition.*

Recommendation #6: Designate a special committee to study issues related to the articulation of ESL programs and courses with four-year colleges and adult schools.

Issue: *Due to the reporting and classification problems with ESL, existing reporting vehicles are not being utilized consistently for ESL and a dearth of information exists.*

Recommendation #7: Ensure that ESL data are gathered and reported annually by adapting existing reporting mechanisms; and

Issue: *Because of their shared refugee or immigration experience, socio-economic status, cultural and academic backgrounds, ESL students require that their instructors possess specific skills unique to their language learning needs.*

Recommendation #8: Develop Title 5 regulations to establish a separate ESL instructor's credential utilizing the guidelines included in this document; establish an ESL instructor inservice training program for existing staff to ensure teacher competency, and produce a report to examine the implications of implementing the credential requirement for new and existing staff.

CHANCELLOR'S OFFICE

CALIFORNIA COMMUNITY COLLEGES
1107 NINTH STREET
SACRAMENTO, CALIFORNIA 95814
(916) 445-8752

:

Unfortunately, we have been unable to approve the following courses for credit because, the course outlines do not make sufficiently clear just what instructors would be held accountable for:

TOP NUMBER	TITLE

Course outlines must do two things (a) Permit local curriculum committees and other auditors and reviewers to determine whether or not the course in question meets certain criteria required for all ADA funded courses under Title 5; and (b) clarify the minimal obligations of the instructors of the course. Instructors should be familiar with this outline and are expected to use it in planning their courses. Their own syllabi, of course, may add objectives, goals, content, assignments and/or materials, may describe topics and objectives somewhat differently, and may place them in a different sequence.)

In order for your "outline of record" to adequately support your application for approval of a special course for the disabled (Ref: 56022 for non-degree applicable credit (55002b), therefore, it must include information regarding:

(1) Student performance objectives specifying precisely the kinds of skills that are to be assessed and strengthened (56022a)
(2) The instruction, coaching, and other interventions, as well as any instructional materials to be used to strengthen these skills, (56022c).
(3) The specific assessment to be used in evaluating student progress toward fulfillment of the individual goals spelled out in their IEP's. (Ref: 56022d)
(4) The amount of work students will have to do for each unit of credit earned. (Ref: 55002b6)

For your assistance, we are enclosing copies of two course outlines as examples. These outlines have been submitted by other colleges and they provide sufficient information to permit our office to determine that they do in fact, meet the requirements of Title 5.

If we can be of any help or answer any questions, please call Dr. Nancy Glock, at (916) 322-6880.

Sincerely,

Rita Cepeda, Dean of the
Educational Standards and
Evaluation Unit

cc: Joshua Smith
James Meznek
Ronn Farland

Enclosures

EVERGREEN VALLEY COLLEGE

COURSE OUTLINE - CREDIT COURSE

Credit applies to AA/AS Degree (see footnote) / /
Credit does not apply to AA/AS Degree /XX/

Guidance 106	Diagnostic Learning Spelling Strategies	N. Gressley	9/29/86
DEPT., COURSE NO.	TITLE	PREPARED BY	DATE

I. CATALOG INFORMATION

UNITS 1/2 - 4 HOURS THEORY ______ HOURS LAB 1-8
HOURS (OTHER) ______

PREREQUISITES: Completion of or Concurrent Enrollment in Guidance 100

REPEATABLE FOR CREDIT: YES (XX) NO ( )

MAXIMUM NUMBER OF UNITS 4

GRADING: Mandatory Credit/No Credit

CREDIT BY EXAM: YES ( ) NO (XX)

CATALOG DESCRIPTION: (Use Complete Sentences)

An intensive individualized course offering learning strategies and instructional intervention for students who have difficulty spelling despite traditional methods of instruction. This difficulty is usually due to a weakness in one or more of the learning processes which affect the ability to spell. Class size is limited and enrollment restricted to those students who qualify. A student may earn a maximum of four (4) units.

II. SCHEDULE INFORMATION:

CLASS SIZE 20 RECOMMENDED ROOM (if any) ______

FACULTY LOADING ______

III. COURSE OBJECTIVES

In the traditional college course, the course outline has uniform objectives. However, this class, as mandated by state law (AB 77) has individually prescribed work with each student having different objectives. Prior to or concurrent with the course, the student is administered a battery of tests to determine his/her learning strengths and weaknesses, both academic and perceptual. With this information, the instructor and student set short and long term objectives to be written to the student's unique needs. With consistent attendance, the minimal expectation is that the student will achieve these goals.

IV. COURSE CONTENT (may use outline form)

Course content will involve the component parts of the spelling process. There is a variety of instructional methods designed for each of the learning modalities: the auditory, visual and tactile/kinesthetic channels. Given an evaluation of the student's learning style and strengths and weaknesses, specific learning strategies will be implemented to compensate for his/her spcific spelling disability. The following areas will be emphasized:

1. Decoding/word attack skills
2. Phonetic skills
3. Structural analysis involving compound words,contractions, plurals, possessives, syllabication, prefixes, and suffixes.
4. Sight words committed to visual memory
5. Linguistic patterns in the English language

The following methods and strategies will be employed to develop spelling proficiencies:

1. Fernald's VAKT Method (used for the remediation of errors)
2. The use of sign language (the finger spelling alphabet) to integrate sensory-motor skills in facilitating memory.
3. The use of cassettes, when appropriate, to provide auditory reinforcement.
4. The use of a metronome to aid in providing a syllabication formula.
5. The use of flash cards to reinforce visual memory.
6. A phonetic approach when the student exhibits auditory strengths and visual perception weaknesses.
7. A more visual approach such as linguistic language patterns when the auditory perception channel is weak and the visual channel is strong.
8. A multi-senosry approach when the student exhibits weaknesses in both channels.
9. The use of mnemonic devices to better associate letters and/or sounds.

V. METHODS OF INSTRUCTION (check appropriate areas)

( ) 10 - Lecture
(X) 20 - Laboratory
( ) 30 - Lecture/Lab
( ) 31 - Instructional Lab
( ) 40 - Work Experience
( ) 51 - TV
( ) 5X - Independent Study
( ) 60 - Field Experience
( ) 99 - Other (explain)

VI. METHODS OF EVALUATION AND EXAMINATION

Progress toward individual behavioral objectives as outlined in the IEP will be monitored daily and reviewed weekly through an on-going system of record keeping by the instructor and the instructional aides. Students will be evaluated based on:

1. Criterion-referenced tests
2. Completion of all assignments
3. Evaluation of work samples
4. Standardized tests such as:

   Wide Range Achievement Test
   The Peabody Individual Achievement Test
   The Huelsman Word Discrimination Test
   The Botel Phonics Test

Some major curriculum programs to be used are:

1. The San Mateo Spelling Program
2. Glass Analysis for Decoding Only
3. Spellbound
4. Programmed Phonics
5. Auditory Discrimination In Depth
6. Spelling Demons
7. Learning Aides: Speak & Spell; Apple II Computer Software
   Manipulatives such as Scrabble Letters
8. Sequential Spelling

KM/bg
7591d

CHANCELLOR'S OFFICE
CALIFORNIA COMMUNITY COLLEGES
1107 NINTH STREET
SACRAMENTO, CALIFORNIA 95814
(916) 445-8752

April 14, 1987

Dr. Richard Lowe
Dean of Instruction
Napa Valley College
2277 Napa-Vallejo Highway
Napa, CA 94558

Dear Dr. Lowe:

The following credit course has been approved and may be offered for apportionment purposes:

TOP NO.	COURSE TITLE
4930.81	English 175: ESL Intermediate Listening Comprehension

The enclosed course has been approved for credit. Please note that under the new Title 5 regulations, its objectives and level would place it in the non-degree applicable credit category, although, of course, your own curriculum committee will make the final determination of its status.

Your outline was excellent. Please let us know if we can use it as an example to share with others.

If we can be of any further assistance, please feel free to call Nancy Glock at (916) 322-6880.

Sincerely,

Rita M. Cepeda

Rita M. Cepeda, Dean
of the Community Colleges
for Academic Standard and
Evaluation

Enclosures

cc: Joshua Smith
Jim Meznek
Ronn Farland

☒ NEW COURSE
☐ REVISION

NAPA VALLEY COLLEGE
NEW COURSE/COURSE REVISION APPROVAL

..mediate Listening Comprehension — Language Arts Division
..E TITLE — DIVISION

• • • • • • • • • • • • • • • • COURSE APPROVAL • • • • • • • • • • • • • •

	SIGNATURE	DATE
NSTRUCTOR PRESENTING -		
NDORSED BY DIVISION CHAIR -	Dorothy P. Menzel	11-26-86
NDORSED BY DEAN OF INSTRUCTION -	R.H. Lowe	11-28-86
NDORSED BY CURRICULUM COMMITTEE -	R.H. Lowe	12/13/86
PPROVED BY BOARD OF TRUSTEES -	R.H. Lowe	1/15/87

• • • • • • • • • • • • • • • COURSE CLASSIFICATION • • • • • • • • • • • • • •

	YES	NO	CATEGORY
. CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION		X	

A. COMMUNICATION IN THE ENGLISH LANGUAGE AND CRITICAL THINKING
  (1) ORAL COMMUNICATIONS, (2) WRITTEN COMMUNICATIONS,
  (3) CRITICAL THINKING
B. PHYSICAL UNIVERSE, LIFE FORMS, AND MATHEMATICS
  (1) PHYSICAL UNIVERSE, (2) LIFE FORMS,
  (3) LABORATORY ACTIVITY, (4) MATHEMATICS
C. ARTS, LITERATURE, PHILOSOPHY, AND FOREIGN LANGUAGE
  (1) ARTS, (2) LITERATURE, (3) PHILOSOPHY,
  (4) FOREIGN LANGUAGE, (5) ACTIVE PARTICIPATION,
  (6) WESTERN CULTURE, (7) NON-WESTERN CULTURE
D. SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS
  (1) SOCIAL INSTITUTIONS, (2) POLITICAL INSTITUTIONS,
  (3) ECONOMIC INSTITUTIONS, (4) CONTEMPORARY SETTINGS,
  (5) HISTORICAL SETTINGS, (6) WESTERN CONTEXT,
  (7) NON-WESTERN CONTEXT
E. LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT
  (1) INTEGRATED ORGANISM, (2) ACTIVITY

	YES	NO	CATEGORY
II. BACCALAUREATE LEVEL		X	

A. EQUIVALENT TO ANY EXISTING COURSE TAUGHT AT A FOUR-YEAR INSTITUTION
B. DESIGNED TO HAVE SCOPE AND CONTENT APPROPRIATE FOR BACC LEVEL
C. REQUIRES FUNCTIONAL OR COMPUTATIONAL SKILLS OR OR APPROPRIATE MOTOR SKILLS
D. GRADED CREDIT COURSE

	YES	NO	CATEGORY
III. NAPA VALLEY COLLEGE GENERAL EDUCATION		X	

A. NATURAL SCIENCE
B. HUMANITIES
C. SOCIAL SCIENCE
D. LANGUAGE AND RATIONALITY
  (1) ENGLISH COMPOSITION, (2) MATHEMATICS,
  (3) COMMUNICATIONS AND ANALYTICAL THINKING

• • • • • • • • • • • • • • • • DATA ENTRY • • • • • • • • • • • • • • • •

	NAME	DATE
MCF CODE ASSIGNED BY		
ENTERED TO MCF BY		
ENTERED IN COURSE OUTLINE FILE BY		
ENTERED IN CATALOG BY		
COMMENTS		

ID 02617500 COURSE EMGL1174 DESCRIPTION ESL INTER READING ACT R ADA 1 AD A
TOP 493081 CONTACT HRS - LEC 3 LAB 0 L&L 3 - CUR Y DHR 000 GE X GR GC MOI 10
PR Y SAM K SEM F86 UNITS -MIN MAX 3 - USOE 00000000 FTE 20 DUR 18 CLS B DIV F

NAPA VALLEY COLLEGE

COURSE OUTLINE

COURSE TITLE ESL Intermediate Listening Comprehension

DIVISION Language Arts/D.S. DATE SUBMITTED Fall, 1986

COURSE AUTHOR(S) Sharon Gocke

COURSE NUMBER English 175 TOP NUMBER 4930.81

UNITS 3 LEC. HOURS 3 LAB HOURS 1

VARIABLE UNIT - YES ☐ - NO ☒ IF YES, IDENTIFY THE DIFFERENT REQUIREMENTS FOR ADDITIONAL UNITS UNDER HEADINGS IN OUTLINE

REPEATABLE FOR CREDIT - YES ☐ - NO ☐ IF YES, NUMBER OF SEMESTERS
ALSO, SHOW HOW PERFORMANCE OBJECTIVES WILL CHANGE FOR EACH SEMESTER.

SHORT TERM COURSE - YES ☐ - NO ☒ IF YES, HOW MANY SEMESTER WEEKS ______

LOWER DIVISION COURSE - YES ☒ - NO ☐ GIVE RATIONALE

PREREQUISITES - Successful completion of English 70, 72, & 74 or consent of the instructor.

CATALOG DESCRIPTION -

This course will emphasize the acquisition of auditory sensitiveness and assimilative capacity in English. Listening comprehension will be enhanced through the use of audio tapes, films, music, storytelling, oral reading, dictation and other appropriate exercises.

SPECIAL FACILITIES/INSTRUCTIONAL RESOURCES NEEDED -

Tapes and tape recorders in the media center.

TEXT(S) - MATERIALS (MINIMUM STUDENT MATERIALS REQUIRED)
FOR CURRENT TEXT SEE TEXTBOOK ADOPTION FORMS ON FILE IN OFFICE OF INSTRUCTION

Intermediate Listening Comprehension: Understanding and Recalling Spoken English, by Patricia A. Dunkel and Phyllis L. Lim - Newbury House Publishers

RELATION OF THIS COURSE TO CURRICULUM IN THE SAME AREA.

This course will complement the three other intermediate ESL courses which cover structure, reading and composition.

COURSE GOALS - (TO APPRECIATE, TO UNDERSTAND, TO SYNTHESIZE, MATTER TO BE LEARNED)

The course goals for each student include an understanding of spoken English in a variety of contexts where comprehension and inference are gained by knowledge of stress, intonation, emphasis, syntax, vocabulary morphology, inflection and contextual clues.

COURSE OUTLINE - PAGE 2

PERFORMANCE OBJECTIVES - IDENTIFY, LIST, OR DEMONSTRATE THE PARTS OF THE SUBJECT WHICH CONTRIBUTE TO THE TOTAL EFFECT TO BE ACHIEVED

Please see attached

PREDOMINANT METHOD(S) OF INSTRUCTION - SELECT ONE

☐ LECTURE
☐ LECTURE - DISCUSSION
☐ DISCUSSION - SEMINAR
☐ LABORATORY
☒ LECTURE/LABORATORY
☐ LEARNING LABORATORY

☐ WORK EXPERIENCE
☐ TELEVISION
☐ MEDIATED INSTRUCTION
☐ COMPUTER ASSISTED INSTRUCTION
☐ DIRECTED (INDEPENDENT) STUDY
☐ OTHER INDEPENDENT STUDY
☐ OTHER (SPECIFY)

EVALUATION OF PROGRESS (EG. THREE MIDTERMS, ESSAY TYPE, OBJECTIVE)

A two-part test consisting of an oral part and a written part will be given after each chapter. The written part will consist of a short essay and objective questions based on an oral presentation. The oral part will consist of a contextually relevant question for each student.

MINIMUM STANDARDS FOR PASSING - MUST BE STATED IN TERMS OF NUMERICAL/PERCENTAGE FIGURE TO EARN A GRADE OF D.

A passing grade will reflect at least 60% accuracy. The grading scale will be the following:

90 - 100 = A
80 - 89 = B
70 - 79 = C
60 - 69 = D
59 & below = F

TOPICAL OUTLINE - CONTENTS (USE ADDITIONAL SHEETS AS NECESSARY)

Please see attached

ESL LISTENING COMPREHENSION
ENGLISH 175
COURSE OUTLINE

PERFORMANCE OBJECTIVES

1. Given a set of orally dictated minimal pairs in English, students will correctly write down the words spoken.

2. Given an orally dictated list of vocabulary words, students will correctly write down the words spoken and provide definitions.

3. Given orally dictated sentence pairs which are syntactically and lexically identical with differences in stress and intonation only, students will correctly identify in writing or orally the semantic import of each oral sentence.

4. Given a complete, dictated passage, students will correctly reproduce the passage orthographically.

5. Given a complete passage read orally (story, dialogue, article, essay, poem, etc.) or a spontaneous speech, song, story, discussion, joke, riddle, etc., students will correctly answer orally and/or in written form factual questions based on the foregoing oral presentation.

    a. Students will complete exercises specific to the oral presentation. Such exercises will include fill in the blanks, true-false, multiple choice, and essay.

    b. Students will be able to hold discussion on the oral presentation indicating their comprehension of what was heard.

    c. Students will draw correct inferences from each oral presentation, thus demonstrating their ability to discern tone, stress, syntax, inflection and morphology and their contribution to contextual meaning. This ability will be tested through oral questions and/or written ones.

6. Given a short lecture presentation, students will take notes in order to write an outline of the lecture that was given.

ESL LISTENING COMPREHENSION
ENGLISH 175
COURSE OUTLINE

TOPICAL OUTLINE

1. Minimal pairs/contrastive analysis.
2. Stress and intonation; rise and fall of the voice.
3. Staccato effect of syllable sequences.
4. Types of pauses.
5. Rhythms of long and short vowels.
6. Types of emphatic forms.
7. Where appropriate, review of syntactic structures, morphology and inflection.
8. Dictation practices.
9. Rules of inference.
10. Context clues.
11. Rules for discerning and creating extrapolation/analogy.
12. Role playing in various contexts.

    (NOTE: All of these are to be presented within the context of an oral presentation using devices such as stories, poems, jokes, riddles, music, essays, dialogues, plays, films, debates, etc.)

13. Riddles and the meaning of puns.
14. Outlining.
15. Note-taking.

ESL LISTENING COMPREHENSION
ENGLISH 175
COURSE OUTLINE

ADDENDUM TO COURSE OUTLINE TO ADHERE TO ITEM 6B ON NEW STANDARDS (TITLE V)

In addition to listening to the required tapes which will correlate with the text, students will be given homework of the following nature:

1. Listen to records and tapes which contain songs, poems, plays, speeches.
2. See at least four new films in English.
3. Interview specific people on topics and write and/or present orally their findings.
4. Attend lectures, conferences, etc. suggested by the teacher.
5. Watch certain T.V. programs and listen to radio broadcasts suggested by teacher.
6. Participate in discussion groups and panel discussions inside and outside class.
7. Play language games suggested by the teacher.
8. Use the telephone for specific assignments.
9. Engage in role-playing where students need to prepare before class. Example: Mock court session where listening is crucial.

CHANCELLOR'S OFFICE
GEORGE DEUKMEJIAN, *Governor*

CALIFORNIA COMMUNITY COLLEGES
1107 NINTH STREET
SACRAMENTO, CALIFORNIA 95814
(916) 445-8752

Dear

The following course(s) have/has been approved and may be offered for credit apportionment purposes:

TITLE TOP. NO

The course outlines submitted suggest that all of these courses would be appropriate for degree applicable credit under the new Title 5 regulations. To fully qualify them for that status, if that is your intent, the existing outlines should be supplemented by the information checked below in order to allow your district curriculum committee to determine that these courses do, in fact, meet all of the new requirements for degree credit.

☐ Homework or lab work of 2 hours outside of class for each 1 hour of lecture per unit as credit

☐ Use of college level materials to complete assignments

☐ Completion of an essay exam and/or skill demonstration that requires "critical thinking". (Design, repair and other "performance" courses should explain what kinds of problems students will be required to solve.)

The specific problem with these two 1305.30 courses is that in their outlines the assessment lists "problem solving" but the objectives only mention "describing", "listing" etc. The objectives should mention the kinds of problems to be solved or situations to which critical thinking should be applied, while the assessment should mention how such abilities are to be demonstrated. For example, a student in this course might be required to design an activities project that would meet the needs of a particular patient and that project could then be assessed by the instructor for how well it incorporated principles from the course and demonstrated critical thinking.

If we can be of any help or answer any questions, please call Dr. Nancy Glock, at (916) 322-6880.

Sincerely,

Rita Cepeda, Dean of the
Educational Standards and
Evaluation Unit

CHANCELLOR'S OFFICE
GEORGE DEUKMEJIAN, *Governor*

CALIFORNIA COMMUNITY COLLEGES
1107 NINTH STREET
SACRAMENTO, CALIFORNIA 95814
(916) 445-8752

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☐ Use of college level materials to complete assignments

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If we can be of any help or answer any questions, please call Dr. Nancy Glock, at (916) 322-6880.

Sincerely,

Rita Cepeda, Dean of the
Educational Standards and
Evaluation Unit

Enclosures

cc: Joshua Smith
Jim Meznek
Ronn Farland

file

CHANCELLOR'S OFFICE

CALIFORNIA COMMUNITY COLLEGES
1107 NINTH STREET
SACRAMENTO, CALIFORNIA 95814
(916) 445-8752

April 20, 1987

Everett Brewer
Dean of Instruction
Saddleback College
28000 Marguerite Parkway
Mission Viejo, CA 92692

Dear Mr. Brewer:

The following (course(s) have/has been approved and may be offered for credit apportionment purposes:

TITLE	TOP NUMBER
4901.00	American Studies Seminar

The course outline(s) submitted suggests that (all of this/these) course(s) are/is appropriate for degree applicable credit under the new Title 5 regulations although, of course, your own curriculum committee will make the final determination of its/their status.

If we can be of any further assistance, please feel free to call Nancy Glock at (916) 322-6880.

Sincerely,

Rita M. Cepeda

Rita M. Cepeda, Dean
of the Community Colleges
for Academic Standards and
Evaluations

Enclosures

cc: Joshua Smith
Jim Meznek
Ronn Farland

ELLOR'S OFFICE
LIFORNIA COMMUNITY COLLEGES
97 NINTH STREET
CRAMENTO, CALIFORNIA 95814
916) 322-4656

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California Community Colleges
MAR 16 1987

SUBMIT IN DUPLICATE

APPLICATION FOR APPROVAL OF NEW CREDIT COURSE NOT A PART OF AN EXISTING PROGRAM

I. College: Saddleback College — Contact Person: Gloria Selufsky
District: Saddleback — Title: Curriculum Specialist
Date: March 4, 1987 — Phone Number: (714) 582-4577

II. Course Descriptive Material:

A. Course Name: American Studies Seminar

B. TOP # 4901.00

C. Static Course Identifying #

D. Goals of Course:

☒ AA or AS Degree
☒ Transfer
☐ Occupational Placement
☐ License Preparation
☐ Skill Upgrading
☐ Other:

E. Units 3 Hrs/Wk Lec. 3 Hrs/Wk Lab. ______

F. Prerequisites:
See attached information

G. Catalog Description:

See attached information

III. Course Objectives:

IV. Is course likely to lead to future program? yes ☒ no ☐ uncertain ☐

V. What evidence of need exists for the proposed course: (Attach Course Outline)
See attached information

VI. Has articulation or planning with neighboring institutions taken place? If yes, briefly describe: Yes ☒ No ☐
See attached information

Superintendent/Chancellor

3/4/87
Date

Use Attachments as Necessary

FORM CCC-EP-1A (Rev. 3/85)

SP 50

* *

1. PLEASE CHECK THE APPROPRIATE CURRICULUM ACTION:

___ Course Revision (Complete I)   ___ Course Deletion (Complete II)   XX New Course Request (Complete III)

* *

2. Course ID IDS 6 [illegible]   3. Initiated by Jack Clancy, Ph.D.

4. Course Title AMERICAN STUDIES SEMINAR   5. Computer Cat ID ________ (For Revision/Deletions Only)

6. Cross Referenced: Yes ___ No XX (If cross referenced, attach Course Outline and Curriculum Action Form.)

7. Repeatable: Yes ___ No XX model: R- ___ Number of Repeats ___
Maximum Accumulated Units ___ If R-A: Sequence ________

8. Desired Date for Initiating Action . . . Semester Fall Year 1987

9. REASON FOR ACTION (Include what evidence of need exists for new course request)

This course is the final course of the American Studies Program. After a student has completed twelve units of A.S. courses, this course is designed to test his or her ability to discuss analytically the issues which result from an understanding of America's democratic institutions.

I. COURSE REVISION (Check Appropriate Boxes)

		FROM	TO
☐	Course ID	________	________
☐	Title	________ ________	________ ________
☐	Units	________	________
☐	Hours	Total Semester ____ Lecture/Week ____ Lab/Week ____	Total Semester ____ Lecture/Week ____ Lab/Week ____
☐	Repeatable model	________	________
☐	Other	Attach superseded course outline with changes underlined and revised course outline.	

II. COURSE DELETION

Attach most recent course outline.

VER   OVER   OVER

NEW COURSE (Course ID IDS 6)

Purpose of Course (More than one may be selected)

XX AA Degree
XX General Education
XX Transfer
___ Skill Upgrading
___ Occupational Placement
___ License Preparation
___ Other ______________

Course requires approval of licensure board . . . . Yes ___ No XX
(if Yes, attach evidence of compliance)
Conforms to the State Plan for Vocational Education . . . . Yes ___ No XX
Is this course to be part of an existing program? . . . . Yes ___ No XX
If yes, which program American Studies
If no, will it be part of a future program? . . . . Yes XX No ___

Repeatable: Yes ___ No XX

Articulation (List the comparable course from UC or CSUC curriculum).

Course ID Amer. Studies 201
Campus Cal State Fullerton
Course Title Introduction to American Studies

* * *

APPROVAL BY COLLEGE OF ORIGIN
(IVC ___ SC ✓)

✓ Lloyd Evans 12-3-86
Division/School Date

____
Curriculum Committee Date

____
Dean of Instruction Date

____
President Date

AGREEMENT/ARTICULATION BY OTHER COLLEGE
(IVC ___ SC ___)

(1) ______________________
Signature/Position Date

(2) ______________________
Signature/Position Date

(3) ______________________
Signature/Position Date

(4) ______________________
Signature/Position Date

APPROVAL BY DISTRICT

____
Executive Vice Chancellor Date

____
Chancellor Date

____
Board of Trustees Date

* * *

FOR DISTRICT USE ONLY

TOPS ___________ SAM ___________ USOE ___________
GEC ___________ VEA ___________

* * *

COURSE OUTLINE

1. Course ID IDS 6

. Computer Catalog ID ______

3. Full Course Title AMERICAN STUDIES SEMINAR

4. Short Title (Abbreviated--21 spaces maximum)

/A/M/E/R/I/C/A/N/ /S/T/

/U/D/I/E/S/ /S/E/M/ /

5. Cross Referenced as:

Course ID(s) ______

Course Title(s) ______

6a. Units 3

b. Lecture Hours/Week 3 x 16.6 = 49.8

c. Lab Hours/Week 0 x 16.6 = 0

d. If a non-credit corequisite course is required, complete the following:
Course ID ______

e. Hours/Week ___ x 16.6 = ___

f. TOTAL SEMESTER HOURS TAUGHT 49.8

7. Prerequisite Course/s Twelve units of A. S., or the equivalent.✓

8. Concurrent Enrollment Course/s ______

9. CATALOG DESCRIPTION

This is the final course of the American Studies Program. Students must complete twelve units of A.S. before enrolling in this course. Students will be required to research issues characteristic of America's democratic institutions and to report their findings to the class for weekly discussions and analyses. In addition, a scholarly paper, fully footnoted and supported by a bibliography, of no less than twelve pages, will be required. Topics covered in this seminar will reflect the political, economic, religious, social, and intellectual institutions of the American people and how American thought has influenced the world.

10. EXPECTED STUDENT OUTCOMES (Upon completion of this course, the student should be able to:

1. Recognize the issues and problems inherent in American living.
2. Research these issues and problems in a scholarly manner.
3. Report to the class his or her research findings.
4. Be able to critique his or her own research and the research of other students.
5. Describe the issues and problems common to American life and to learn to cope with them.

11. PRIMARY METHOD OF PRESENTATION (for credit courses check only one, for non-credit courses check those that apply)

___ Lecture
___ Laboratory
___ Lecture/Discussion
___ Discussion Seminar (no lecture)
___ Lecture/Laboratory
___ Learning Center
___ Directed Study
___ Field Experience
___ Television
___ Radio
___ Mediated Learning Center
XX Other Team Teaching Methodology.

OVER OVER OVER

12. **Scope, Content and Method of Evaluation** (see instructions)

A. The seminar approach will be utilized:

   (1) Two class meetings per week

   (2) One and one-half hours per each meeting

B. Procedure:

   (1) Two instructors, one from Liberal Arts, the other from Social Science will serve as a team to conduct the seminar discussions.

   (2) Students will choose the topics for weekly discussion

C. Evaluation:

   (1) Research and discussion of the weekly topics

   (2) Scholarly papers

* *

COURSE HISTORY

Date of Board of Trustees Approval:

New Course ______________________ Deletion ______________________

Revisions ________/________/________/________/________/________/________

* *

ERIC Clearinghouse for
Junior Colleges NOV 13 1987